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# ROMAN SYRIA

BY

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## PREFACE

It is the intention of the present writer to give an economic survey, up to the time of Diocletian, of those regions of the Near East between Asia Minor and Egypt which belonged to the Roman Empire. The districts of this area were and are interdependent economically. Its boundaries, during the period of Roman rule, were: in the north the Roman provinces of Cilicia and Cappadocia as well as the semi-independent buffer state of Armenia, in the west the Mediterranean Sea, and in the south the Roman province of Egypt and the Red Sea. The frontier in the east, on the side of the Parthian and later of the Sassanian Empire and of the tribes of the Arabian desert, continually shifted with changes in the political situation.

The focus of Roman power in the Near East was the province of Syria, which had been established by Pompey in 64 B. C. At the same time the Roman administration began to create a zone of buffer states in the east of the region from Nabataean and Transjordanian Arabia to Mesopotamia.<sup>1</sup>

The districts from Syria and Palestine to Babylonia had a close economic and cultural connection as early as the time of the ancient oriental empires. These links were greatly strengthened from the time of Alexander and the first Seleucids. Syria and Babylonia with their many Greek *poleis* now became centres of Greek civilization in Asia and were bound together by close economic ties. These ties were loosened, but not broken, by the new frontiers of the several states which arose out of the collapse of the Seleucid Empire in the II/I centuries B. C.; and no more serious economic consequences than these

<sup>1</sup> For the history, the administration and the social conditions of the Roman Near East see especially E. S. Bouchier, *Syria as a Roman Province* (1916); J. Dobiaš *Dejiny Římské provincie Syrské*, I (1924); H. Dessau, *Geschichte der römischen Kaiserzeit*, II, 2 (1930), 622 f., 706 f.; M. Rostovtzeff, *Social and Economic History of the Roman Empire* (Engl., Germ. and Ital. ed.), Index s. v. Mesopotamia, Palestine, Palmyra, Syria; M. Rostovtzeff, "La Syrie Romaine," *Rev. Hist.*, CLXXV (1935), 1 f.; A. H. M. Jones, *The Cities of the Eastern Roman Provinces* (1937), chapters IX, X; Pauly-Wissowa, *R.-E.*, Art. Arabia, Babylonia, Kommagene, Mesopotamien, Syria; *C. A. H.*, IX, 379 f., 602 f., 714; X, 47 f., 254 f., 279 f., 316 f., 400 f., 620 f., 661 f., 680 f., 747 f., 849 f.; XI, 104 f., 137 f., 236 f., 345 f., 613 f.; L. Homo, *Le Haut-Empire. Hist. Ancienne* (ed. Glotz), *Hist. Rom.*, III (1933) Index s. v. Arabie, Mesopotamie, Nabatéens, Palastine, Parthes, Syrie; G. A. Harrer, *Studies in the History of the Roman Province of Syria*, Princeton (1915); A. Momigliano, "Ricerche sull' organizzazione della Giudea sotto il dominio romano," *Ann. Sc. Pisa*, III (1934), 183 f., 347 f.; M. P. Charlesworth, *Five Men* (1936), 3 f., 65 f.

followed the struggle of seven hundred years between Rome and Iran for supremacy in the Near East, a contest which ended only with the Arabic conquest of the whole battle ground from the Mediterranean to India.<sup>2</sup>

During the time of the Principate (which is the sole consideration of this chapter) the Roman frontiers in Asia were subject to changes similar to those on the Rhine, the Danube, the Black Sea, and to those in North Africa, Nubia and North Britain. The old Republican and Augustan zones of buffer states were slowly provincialised, and the whole of the Roman territory was brought into line and assimilated, as far as possible, under a united government. The frontiers of the province of Syria were extended eastwards and southwards until administrative subdivisions became necessary; these included Palmyra and reached the whole middle course of the Euphrates. Wide territories were incorporated into the newly created provincial units of Commagene and of Mesopotamia in the east and of Palestine and of Arabia in the south. Up to Diocletian's reign the northwestern portion of Mesopotamia between the Euphrates and the Tigris as well as all the caravan routes and comparatively fertile tracts in the north of Arabia from Sinai to the Euphrates across Transjordanian were eventually brought under Roman rule.

On the other hand, Trajan met with no success in his famous attempt to create Roman provinces in the middle and southern regions of modern Iraq and to transform the remaining parts of the Parthian Empire into Roman buffer states against India. Instead, his successors began the construction of a fortified *limes* for the protection of the remaining Roman territory. The long line of fortifications is now well known to us from aerial photographs and from archaeological surveys.<sup>3</sup> But over the whole period which we are considering the Roman armies crossed the *limes* for temporary conquest, and occasionally for the purpose of helping their allies in the frontier districts.<sup>4</sup>

Throughout the period of the Roman Principate not only Syria, Palestine and northwestern Arabia but also Babylonia, in spite of its

<sup>2</sup> See A. Christensen, "L'Iran sous les Sassanides," *Annales du Musée Guimet*, XLVIII (1936), *passim*.

<sup>3</sup> See Pauly-Wissowa, *R.-E.*, Art. Limes; Syria, 1679 f., 1682 f., 1693; A. Poidebard, *La trace de Rome dans le désert de Syrie. Le limes de Trajan à la conquête Arabe* (1932); A. Poidebard, *Mélanges d'Arch. et d'Hist.*, LIV (1937), 5 f.

<sup>4</sup> A. Christensen, *op. cit.*, 213 f.; *R.-E.*, Art. Mesopotamien, 1148 f.

Iranian ruling class, seem to have remained the outposts of Mediterranean civilization. From the economic and cultural aspects they preserved much more of the heritage of Alexander and of his Diadochs for the future development of Asia than they received from the influences of India, central and east Asia. The Greek and Roman writers, the local inscriptions, parchments and coins in different languages, the numerous and characteristic Greek and Latin terms and expressions in all oriental languages of the Near East, the excavations in these regions and the very valuable evidence of the Talmud—all point to the same conclusion.

The national cultures which existed during Roman Imperial times in many parts of the Near East derived more or less from Prehellenistic civilizations. But they had been cast into quite a new mould for the future by Hellenistic cultural propaganda as well as by Hellenistic pressure. Native dialects—as the Aramaic of Talmudic Jewry, the Aramaic of the Mandeans, Palmyrenians and Nabataeans, the Syriac of northern Syria and Mesopotamia, the Pahlavi of Iran and Babylonia—became literary and documentary languages and were not seldom of the highest importance for religious, economic and cultural purposes. But the universal cultural language remained Greek, while Latin was used in the administration, in the higher courts and in the territories of the Roman citizen colonies. The Roman Near East was polyglot. But the native languages had only been preserved by the adoption of so many Greek and Latin terms and even syntactical constructions and idioms that communication was less difficult and the way of thinking less oriental than might be supposed.<sup>5</sup> Of course it is more difficult for the modern scholar to draw up an economic survey of Syria than of the Greek and Latin speaking Roman provinces because of the variety of our authorities.

The economic life of Western Asia in the time of the Principate was affected by the same forces as the spiritual and the cultural life of these parts of the Ancient World. The Hellenistic-Roman civilization introduced very important new products, methods of production and technical inventions into the East. The effects of a complete exchange of seeds and of cattle for breeding are evident today from

<sup>5</sup> See C. Moss, *Muséon*, XLVIII (1935), 87 f.; F. Rosenthal, *Die Sprache der palmyrenischen Inschriften*, *Mitt. Vorderas.-Aeg. Ges.*, XLI, 1 (1936); S. Krauss, *Griechische und lateinische Lehnwörter im Talmud* (1898).



Britain to India.<sup>6</sup> After the time of Alexander customs, dress, building, bathing and sport changed in the East to such an extent that the artisans had to forsake much of their old technique. The Greek *ergasterion* revolutionized handicraft and mining, while commerce was modified by the Greek customs of *kapeleia*, *emporía* and *naukleria*. Banking methods made some progress owing to the introduction of Greek currency and *trapezai* and the Hellenistic-Roman system of money-transfer. The more rational Greek methods of estate management proved very useful for agriculture. Technical inventions of the Hellenistic-Roman age, such as an improved plough, the sakiye of the modern Near East(!), the so-called Archimedean screw, the watermill and many other minor inventions were of the greatest importance to the country districts. No urban profession remained unaffected by Western technical inventions.<sup>7</sup>

But the new conditions did not destroy the ancient oriental background. In the first generation after Alexander, Greek and Oriental economics for the most part existed side by side without real assimilation. Later a synthesis was effected just as in the adoption of Greek terminology and sometimes syntax into the oriental languages of the same centuries. From the first century B. C. the East not only gave evidence of its acquisition of Greek mechanics and economics but proceeded to repay the debt. New forms of architecture and painting originated in western Asia, glass-blowing was invented on the Phoenician coast and an Egyptian discovered a superior method of navigation which shortened the journey to India.<sup>8</sup> In the late Roman period, with which we are not concerned in this survey, a new cultural and economic unity was achieved, a separate oriental civilization with a Hellenistic-Roman foundation similar to that of western mediaeval civilization. In the first glorious five hundred years of the Islamic world the Greek and Roman heritage, if lost in the West, was restored by the East.<sup>9</sup> Such was the important sequel of the tendencies in western Asia which we have now to consider in detail.

<sup>6</sup> See e.g. I. Loew, *Die Flora der Juden*, IV, 59, 60 f., 126 f.

<sup>7</sup> See Heichelheim, *Schmollers Jahrbuch*, LVI (1932/3), 1025 f.; *R.-E.*, Art. *Μύλη*, Torcular, Trapetum; Suppl. V, Art. Sitos (845/6); A. G. Drachmann, *Ancient Oil Mills and Presses* (1932); A. W. Persson, *Opuscula Archaeol.*, I (1935), 129 f.

<sup>8</sup> *R.-E.*, Art. Hippalos.

<sup>9</sup> See C. H. Becker, "Der Islam im Rahmen einer allgemeinen Kulturgeschichte," *Zeitschr. Deutsch-Morgenl. Ges.*, LXXVI (1922), 18 f.; C. H. Becker, *Das Erbe der Antike im Orient und Okzident* (1931).

## CHAPTER I

### THE LAND

#### i. *Agricultural Products*

According to the sources the agricultural possibilities of the Roman Near East must have been very great. It is said that in Mesopotamia wheat brought an increase of fifty to one hundred-fold.<sup>1</sup>

Plin., *N. H.*, XVIII, 162: "At Babylon, however, they cut the blade twice and then let the cattle pasture on it the third time, for otherwise it would run to nothing but leaf. Even then the soil is so fertile that it yields fifty and, with care, as much as a hundred-fold. Nor is the cultivation of it attended with any difficulty, the only object being to let the ground be under water as long as possible in order that the extreme richness and exuberance of the soil may be modified. The Euphrates, however, and the Tigris do not deposit a slime in the same way that the Nile does in Egypt, nor does the soil produce vegetation spontaneously; but still so great is the fertility that, although the seed is only trodden in with the foot, a crop springs up spontaneously by the following year."

In the neighbourhood of Babylon barley produced up to three hundred-fold.<sup>2</sup> This is very probably an exaggeration, but in any case the ancients believed the regions of the Euphrates and Tigris to be much better corn lands than Egypt, and considered Syria as equal to the Nile valley.<sup>3</sup>

Plin., *N. H.*, XVIII, 170: "The method adopted at Seleucia in Babylonia is very similar to this (i. e. the method of Egypt); but the fertility there is still greater owing to the overflow of the Euphrates and Tigris, the degree of irrigation being artificially modified in those parts. In Syria, too, the furrows are made extremely light."

The Talmud also makes special mention of the excellent wheat of Cordyene in Babylonia.<sup>4</sup> Syrian species of wheat were not only im-

<sup>1</sup> See also Theophrast., *Hist. plant.*, VIII, 7, 4; see also *Bab. Taanit* 10a (The Babylonian Talmud, tractate *Taanit*); Krauss, *Talmud. Arch.*, II, 164. (It is well known that in almost any fertile region a single grain may produce six stalks with some 30 grains in each head. But no experienced farmer accepts the fact as normal for a whole field.)

<sup>2</sup> Strabo, XVI, C 742, § 14.

<sup>3</sup> Pauly-Wissowa, *R.-E.*, Art. Babylonia, 2703, 2713.

<sup>4</sup> *Bab. Pesach*. 7a; *Pal. Pasach*. 1, 27c 74 (The Palestinian Talmud, tractate *Pesachim*).

ported into Egypt in times of famine but were cultivated permanently in that country.<sup>5</sup> This is not surprising since Syrian wheat was heavier than the usual Egyptian varieties.

Palestine, on the other hand, was not a corn-exporting country and could provide only in normal times for its own population.<sup>6</sup> The average barley of Edom was very poor,<sup>7</sup> and Idumaea and Zebulon were not at all fertile.<sup>8</sup> Great agricultural successes were so difficult for the farmers in the Ituraean principality that they mentioned them with pride in inscriptions.<sup>9</sup> There were good wheat and barley districts in Galilee, Judaea, Benjamin and in the neighbourhood of Gadara in the Transjordanian Decapolis.<sup>10</sup> Corn might have brought a similar increase there as in Babylonia,<sup>11</sup> but the districts were not extensive. For this reason the export of flour from Palestine even to the neighbouring Syrian regions was prohibited by the Talmudic authorities.<sup>12</sup>

*Bab. Baba Bathra* 90b, 91a: "One must not carry out of Palestine fruit [= corn] (and) things which are life's necessities such as, for instance, wines, oils and the various kinds of flour. R. Judah b. Bathyra (c. 150 A. D., Palestine and Nisibis) permits (it) in (the case of) wine, because (thereby) one diminishes levity. And it is not permitted to carry out of Palestine to Syria. And Rabbi (135–c. 210 A. D.) permits this from one hyparchy (on the border of Palestine and Syria) to (an adjacent) hyparchy (in Syria). Public prayers are offered for goods (which have become dangerously cheap) even on the Sabbath. R. Johanan (third century A. D., Palestine) said: This applies to linen garments in Babylon and wine and oil in Palestine. R. Joseph (early fourth century, Babylonia) said: This (is only so) when (these have become so) cheap that ten are sold at (the price of) six."

A five-fold harvest was considered normal in Palestine, and this is

<sup>5</sup> Johnson, *Econ. Surv.*, II, 1 note 3; Plin., *N. H.*, XVIII, 63; Pap. Lond. II p. 96; 97; 98.

<sup>6</sup> Galling, *Bibl. Realea.*, Art. Ackerwirtschaft, Getreidearten und Ernte; F. Stummer, *Oriens Christianus*, 3rd Ser., X (1935), 61 f.; Vogelstein, *Landwirtschaft in Palästina*, 7 f., 46 f.

<sup>7</sup> *M. Kethub.* V 8 (The Mishna, tractate *Kethubot*); *Bab. Kethub.* 64b; *Pal. Kethub.* 30b 58.

<sup>8</sup> *Bab. Meg.* 6a; *Pal. Orla* II 62a, 1; *Pal. Bikk.* III 1, 65c 14.

<sup>9</sup> Waddington, nr. 2412; Dussaud, *Voyage*, p. 203, nr. 88.

<sup>10</sup> *Bab. Pesach.* 8b; *Bab. Meg.* 6a; *M. Maas.* II 3.

<sup>11</sup> Matth., XIII, 8, 23; Varro, *R. R.*, I, 44, 2; *Bab. Kethub.* 112a; *Bab. Baba Bathra* 122a.

<sup>12</sup> Krauss, *Talmud. Arch.*, II, 350, 687 note on *Bab. Baba Bathra* 91a; *Pal. Joma* V 3, 42c 17.

quite credible.<sup>13</sup> Excellent corn seems to have come from the neighbourhood of the Sea of Nazareth (note 10). The best wheat of Palestine was believed to grow near Mikmash and Zenocha in Judaea; the second best, in the Galilean valleys of En-Socher and Arbel.<sup>14</sup>

Barley seems to have been the staple food of Dura Europos on the Euphrates in the third cent. A. D.<sup>15</sup> The Palestinian barley of Bethmakleh in the Kidron valley and of Gaggoth Zerifin in the north of Ramleh was also well known.<sup>16</sup> On the other hand, in the fertile district of Antioch on the Orontes, in Parthian Babylonia and in many other regions, barley seems to have been more or less restricted to the poor.<sup>17</sup> Wheat was more popular there in any case and was cultivated in different varieties (note 6). Rice was cultivated spasmodically, especially near the Syrian coast and in Babylonia, in spite of its need for more extensive artificial irrigation.<sup>18</sup> As for inferior cereals, in the Roman Near East we find oats, several kinds of millet, spelt, rice wheat, and coarser varieties of wheat; but they were not cultivated very extensively.<sup>19</sup>

Pliny (*N. H.*, XVIII, 161) writes of double crops, with pasturing in the same year, as usual in Babylonia. The Talmud knows of the same intensive cultivation in Palestine as well as in Babylonia.<sup>20</sup> Some passages of the Talmud also speak of several systems of rotation of crops and of mixture of different crops,<sup>21</sup> but such progressive methods

<sup>13</sup> *Bab. Kethub.* 112a: "(R. José of Sepphoris [second century A. D.] said): 'A sea of field in Judaea yielded five seas—one of fine flour, one of sifted fine flour, one of bran, one of coarse bran and one of cibarium.'"

<sup>14</sup> Krauss, 180, 565 note 204.

<sup>15</sup> *S. E. G.*, III, 386; 394; 399; 409; 411; 412; 414; 416.

<sup>16</sup> *M. Kel.* XVII 8; *M. Menach.* 10 (6) 2; *Bab. Menach.* 64b.

<sup>17</sup> Liban., *Or.* 11, chapters 21 and 23; Liban., *Or.* I, chapt. 8; *Bab. Shabb.* 140b; *Bab. M. Katan* 28a; Loew, *Flora der Juden*, I, 782; II, 60; Vogelstein, *loc. cit.*

<sup>18</sup> Strabo, XV, C 692, § 18; *M. Sebiith* II finis; *Pal. Sebiith* 33d 25; *Bab. Pesach.* 51a; *Bab. Berakh.* 35a, 36b, 37a, b, 38a; *Bab. Erubin* 81a.

<sup>19</sup> Jardé, *Les céréales dans la Grèce ancienne*, 5 f. on Plin., *N. H.*, XVIII, 81; Dalman, *Arbeit und Sitte in Palästina*, II, 243 f.; Krauss, I, 101, 459 note 327; II, 179 f., 564/5 note 200; Newman, *Agric. Life of the Jews in Babylon.*, 90 f.; Vogelstein, 44 f.

<sup>20</sup> Palestine: *M. Pea* II 5, 6; *M. Baba Bathra* III 1; *M. Demai* I 1; *M. Sebiith* IX 4. Babylonia: *Bab. Erub.* 18; *Bab. Baba Mezia* 106b. See Vogelstein, 18, 50 f.; Newman, 51 f., 78 f., 92/3; Krauss, II, 167.

<sup>21</sup> Palestine: *M. Baba Mezia* IX 8, 9; *M. Pea* III 1; *M. Men.* VIII 3; *Pal. Taan.* III 66d. Babylonia: *Bab. Baba Mezia* 104b, 107a; Vogelstein, 48 f.; Newman, 51 f., 78 f., 92/3; Krauss, II, 182.

do not seem to have been the rule. Very rich soils could bear continuous cultivation of the same products; however, the usual custom was to leave half of the land fallow or to practise other primitive methods of leaving the soil idle.<sup>22</sup> The scientific methods of Hellenistic agriculture must have been as well known in western Asia as in Egypt. Our authorities give very copious notes about the improvement and the fertilization of the soil,<sup>23</sup> the different kinds of soil and their uses,<sup>24</sup> the production of seed-corn in special plantations,<sup>25</sup> the ploughs, the methods of ploughing and sowing,<sup>26</sup> the agricultural work between seed and harvest,<sup>27</sup> the methods of harvesting and threshing (sometimes with *μηχαναί*)<sup>28</sup> and the storing of the product.<sup>29</sup>

As compensation for Syrian wheat introduced into Egypt, the Nile country at an early time gave back its excellent species of bean to Palestine, Syria and Babylonia.<sup>30</sup> In the period of the Principate this vegetable was very popular and was universally cultivated in western Asia. In Palestine, moreover, we find the cultivation of Egyptian lentils<sup>31</sup> and of a Cilician species of pulse,<sup>32</sup> which must have been introduced in a similar way. Of other legumes we notice *φακῆ* at Dura Europos and in Palestine and Babylonia several varieties of *aracus*, lentil, bean, kidney-bean, chick-pea, vetch and lupin. The Talmud at times speaks of special regulations in land-leases in connection with these agricultural products.<sup>33</sup>

<sup>22</sup> Krauss, II, 180 f.; Newman, 40, 78 f.; Vogelstein, 48 f.

<sup>23</sup> *Bab. Berakh.* 57b; *Bab. Beza.* 8a; *Bab. Kethub.* 110b; *M. Men.* VIII 3; Krauss, II, 158, 161 f., 167 f.; Newman, 87 f.; Vogelstein, 8 f., 18 f.

<sup>24</sup> *Bab. Pesach.* 47b; *Bab. Shabb.* 85a; *M. Kil.* II 7; VII 1; Krauss, 158 f.; Vogelstein, 4 f.

<sup>25</sup> Krauss, II, 176; Vogelstein, 38 f.

<sup>26</sup> Dalman, I, 261 f., 329 f., 400 f., II, 64 f., 130 f.; Gallinger, *Bibl. Reallex.*, Art. Pflug; Krauss, II, 169 f., 176 f.; Newman, 34, 74 f.; Vogelstein, 25 f., 38 f.; Plin., *N. H.*, XVII, 3, 30; XVIII, 170; Theophr., *Caus. Pl.*, III, 20, 5.

<sup>27</sup> Dalman, I, 400 f., II, 304 f., 327; Krauss, II, 182 f.; Vogelstein, 51 f.

<sup>28</sup> Dalman, I, 413 f., 550 f., III, 1 f. *passim*; Krauss, II, 185 f.; Newman, 79 f.; Vogelstein, 57 f., 65 f.

<sup>29</sup> Dalman, I, 550 f., III, 188 f.; Gallinger, *Bibl. Reallex.*, Art. Speicher; Krauss, II, 188, 193 f.; Vogelstein, 71 f.; Luke, X, 2 f.; XII, 24 f.; XIII, 3 f., 12 f., 24 f.

<sup>30</sup> Theophr., *H. Pl.*, IV, 8, 8; Athen., III, 72d; Plin., *N. H.*, XVIII, 122; *M. Kilaim* I 2; II 11; *M. Sebiith* II 8, 9; *M. Shabbath* IX 7; *M. Nedarim* VII 1, 2; Loew, *Flora*, II, 497, 505 f.

<sup>31</sup> *M. Maasroth* V 8.

<sup>32</sup> *M. Maasroth* V 8; *M. Kelim* XVII 12; *M. Negaim* VI 1; Loew, *Flora*, II, 281 f., 496 f.

<sup>33</sup> *S. E. G.*, III, 437; *Bab. Baba Mezia* 107a; Dalman, II, 264 f.; Krauss, I, 115 f.;

The lupin was a popular food for cattle and was also sometimes eaten by men. As in Egypt and in other Mediterranean countries of our period this plant was occasionally cultivated in rotation with corn, an Hellenistic invention.<sup>34</sup> Other fodder which had to be sown were, as in Egypt, lotus, hay, and fenugrec in some varieties—the last also a human food.<sup>35</sup> Many meadows were sown and leased in Mesopotamia, where facilities for irrigation were found similar to those in Egypt. According to the Talmud there might be three reapings in a single month.<sup>36</sup> Special camel fodder was planted in the province of Arabia.<sup>37</sup>

Flax, hemp and cotton were cultivated in the whole of western Asia as well as in Babylonia.<sup>38</sup> Since hemp was very cheap in Babylonia it must have been extensively cultivated.<sup>39</sup> The hemp-ropes of Sura, perhaps an important centre of hemp cultivation, were well known.<sup>40</sup> Centres of flax cultivation on the Euphrates and Tigris were the regions of the town of Pumbadita, which had a special flax market and a special flax-soaking district;<sup>41</sup> of Nehar Abba, which produced the most solid flax of Babylonia; of Borsippa, a *λινουργεῖον μέγα*, and of Sura. But the native flax production does not seem to have been sufficient for the needs of the Babylonian population; otherwise it cannot be explained why the Talmud absolutely forbids the export of linen products from Babylonia to prevent a dearth of this important clothing material.<sup>42</sup> Palestinian flax, on the other hand, was exported and was very highly esteemed. It was considered superior to the flax of Elis.<sup>43</sup>

Spices such as coriander, mustard, anise, cumin, ginger, mint and

II, 188/9, 198, 572 note 257, 574 note 264; Loew, *Flora*, II, 427 f., 437 f., 442 f., 481 f., 492 f., 503 f.; Newman, 80.

<sup>34</sup> *Bab. Baba Mezia* 108b; Newman, 51/2; Obermeyer, *Die Landschaft Babylon.*, 169 f., 180 f.

<sup>35</sup> Dalman, II, 297 f., 349 f.; Krauss, I, 118; II, 187, 572/3 note 257; Loew, *Flora*, II, 414 f., 463 f., 465 f., 475 f.

<sup>36</sup> *Bab. Baba Bathra* 28b; Newman, 111.

<sup>37</sup> *Pal. Kilaim* I, 1, 26d 59; *ibid.*, 5, 30a 54.

<sup>38</sup> Flax: *Bab. Taanit* 29b; *Bab. M. Katan* 12b; Dalman, II, 298 f.; Krauss, I, 138 f. Cotton: *Bab. Shabb.* 21a; Dalman, II, 299 f.; Krauss, I, 140; Loew, II, 235 f. Hemp: Dalman, II, 299 f.; Krauss, I, 140; Loew, I, 255 f.

<sup>39</sup> *Bab. Baba Mezia* 51a; *Bab. Ketub.* 8b.

<sup>40</sup> *Bab. Ketub.* 67a.

<sup>41</sup> Pumbadita: *Bab. Gitt.* 27a; *Bab. M. Katan* 12b. Nehar Abba: *Bab. Shabb.* 140b. Borsippa: Strabo, XVI, C 739, § 7. Sura: *Bab. Megillah* 5b.

<sup>42</sup> *Bab. Baba Bathra* 91a.

<sup>43</sup> Paus., V, 5, 2; Loew, II, 208 f.

ruce were, of course, cultivated in western Asia. But the Asiatic varieties were not very well known outside these regions and were only locally consumed.<sup>44</sup> Egyptian mustard was much better than that of western Asia. For this reason the Egyptian species was introduced into the agriculture of Palestine.<sup>45</sup>

The production of dyes must have been extensively cultivated in the neighbourhood of the textile-manufacturing district of Tyre.<sup>46</sup> The gall-nuts from Commagene were very famous.<sup>47</sup> Woad, saffron, henna, madder and other plants were cultivated in Palestine and Babylonia as well. Henna from Ascalon was greatly valued.<sup>48</sup> Such plants, as it was well known, could only be cultivated in very rich soil; otherwise the land would soon be exhausted. Saffron plantations were very valuable.<sup>49</sup>

The oil-producing plants of Syria, Palestine and Babylonia had no great reputation with the exceptions of the *radicula* of Syria and of Babylonia (Plin., *N. H.*, XIX, 48) and of the delicious radish, a plant native to Syria, which was also cultivated outside.<sup>50</sup> Oil was also extracted from cotton-seed in Babylonia<sup>51</sup> and from sesame both in Petra and in Babylonia, regions where olive oil could hardly be produced.<sup>52</sup> According to our sources special sesame districts were Babylonia in the narrower sense, the region of the Nehar Malka canal, Pumbadita, Nehardea and Mata Mehasya.<sup>53</sup> Sesame was sometimes so important that its seed was more expensive than wheat-seed.<sup>54</sup> Pales-

<sup>44</sup> Matth., XIII, 31; Mark, IV, 30 f.; Plin., *N. H.*, XXI, 61; Dalman, II, 290 f.; Krauss, I, 116 f., 145 f.; Newman, 111; Loew, II, 65 f., 107 f.; III, 120 f., 423 f., 435 f., 441 f.

<sup>45</sup> M. Kilaim I 2.

<sup>46</sup> Strabo, XVI, C 757, § 23; Plin., *N. H.*, XIX, 48.

<sup>47</sup> Plin., *N. H.*, XVI, 27; XXIV, 9; XXV, 175.

<sup>48</sup> Dalman, II, 300 f.; Krauss, I, 145, 551 notes 218-224; Newman, 110/11; Loew, I, 19 f., 358 f., 394 f.; II, 7 f., 218 f.; III, 127 f., 270 f.; IV, 117 f.

<sup>49</sup> Loew, II, 11.

<sup>50</sup> Plin., *N. H.*, XIX, 81; *R.-D.*, Art. Syria, 1563. For *πεφανθία* see also M 28 (ined.) from Dura.

<sup>51</sup> Bab. Shabb. 21a; Loew, II, 240.

<sup>52</sup> Strabo, XVI, C 779, § 21; Strabo, XVI, C 742, § 14; Theophr., *H. Pl.*, VIII, 7, 4; Sym., 28b; Herodot., I, 193; M. Shabb. II 2; Bab. Shabb. 23a; 26a; Bab. Nedarim 53a; Bab. Baba Bathra 106a; b; Pal. Aboda Zara II 8; Pal. Shabb. I 4.

<sup>53</sup> Strabo, XVI, C 742, § 14 (Babyl.); Bab. Gitt. 73a (Neh. Malk.); Bab. M. Katan 12b; Bab. Baba Quamma 27b (Pumb., Nehard.); Bab. Baba Bathra 25b; 26a (M. Mehas.).

<sup>54</sup> Bab. Baba Mezia 21a; 104b.

tinian legumes from which oil was extracted were, according to the Talmud, sesame, radish, *ricinus* and bitter-gourd.<sup>55</sup>

It would appear that the vegetables of western Asia were superior to those of Egypt. The numerous Syrian varieties of cabbage were popular and even proverbial in the Roman period,<sup>56</sup> as were the mushrooms of Jerusalem, the garlic of Baalbek, and the onions of Ascalon and of Rechef.<sup>57</sup> On the other hand, vegetables of foreign origin were cultivated in Palestine and in Babylonia, according to the Talmud, with success: the Greek and the Egyptian gourds, the Bedanic pomegranate, the Greek and the Roman hyssop.<sup>58</sup> The pomegranates of the Palestinian plains and of the region of Geba were excellent.<sup>59</sup> Inscriptions from Dura Europos (*S. E. G.*, III, 437; M 28; 56; 105; 112; 146 [ined.]) speak of *καλοκύνθια*, *κρόμμυα*, *λάχανα* and *ρεφανίδια*; vegetables such as leek, radish, lettuce, cucumber, turnip, carrot, cabbage, truffle, mushroom, melon, gourd, onion, hyssop, garlic, cress and cuscuta (for Babylonian beer) were universally popular.<sup>60</sup> Artificial irrigation was very important for the production of vegetables in the climate of western Asia,<sup>61</sup> and the peasants knew how to accelerate the growth of certain vegetables, to bring them to market at unusual times and to see that they were available throughout the year.<sup>62</sup>

The lilies of Antioch and of Ascalon were well known.<sup>63</sup> We hear of many other Palestinian and Babylonian flowers, but seldom outside their own locality.<sup>64</sup> The products of the medicinal and aromatic

<sup>55</sup> Dalman, II, 296 f., IV, 272/3; Krauss, II, 226; Loew, III, 1 f.; IV, 94 f.

<sup>56</sup> Plin., *N. H.*, XX, 33; Loew, II, 220 f. For Babylonia see *Gen. Rabbah* V: "I cause plants to grow up in thirty days and vegetables in three."

<sup>57</sup> Krauss, I, 116; Loew, I, 303 (mushrooms); Plin., *N. H.*, XIX, 101, 105; Strabo, XVI, C 759, § 29; M. Maasroth V 8 (onions); M. Maasroth V 8 (garlic); Steph. Byz., s. v. Ascalon.

<sup>58</sup> M. Kilaim I 2; I 5; M. Orla III 7 (gourds); Loew, *Flora*, III, 85/6 (pomegranate); M. Para XI 7; M. Shabb. XIV 3; Loew, II, 72 f.; G. N. Crowfoot—L. Baldensperger, in *Pal. Explor. Quart.*, LXIII (1931), 89 f. (hyssop).

<sup>59</sup> *Pal. Bikk.* 1, 63d 75; *Bab. Beza.* 3b; M. *Kelim* XVII 5; Loew, III, 80 f.

<sup>60</sup> Dalman, I, 338 f.; II chapt. 10 C-E; Krauss, I, 116 f.; II, 180, 562/3 notes 189, 194, 195, 565 notes 198 f., 206; Loew, I, 26 f., 344 f. *passim*, 406 f., 415 f.; II, 65 f., 125 f., 226 f., 246 f.; III, 70 f., 423 f., 426 f.; IV, 92 f., 108 f.; Newman, 105 f.; Joseph., *Bell.*, IV, 9, 8, § 541; *Pal. Berach.* 57b.

<sup>61</sup> *Bab. Erub.* 104a finis; Krauss, I, 116; II, 175.

<sup>62</sup> *Bab. Mh.* 4a; *Pal. Pea.* 7, 3, 20b 8; Krauss, I, 116.

<sup>63</sup> Plin., *N. H.*, XXI, 24.

<sup>64</sup> Dalman, I, 96 f., 249 f., 348 f., 542 f.; Loew, I, 367 f.; II, 1 f. *passim*, 152 f. *passim*, 203 f., 257 f., 296 f.; III, 114 f., 193 f., 396 f.; IV, 59 (new flowers of the Hellenistic period), 82 f., 261 f. *passim*, 468 f.



plants of western Asia were exported to the whole of the Greek and Roman world. There were many more varieties there than in Egypt, and whether cultivated or wild they were a most important source of revenue for the country. Among many other export products of this kind we make particular mention of the Syrian *styrax* (well known in Iran and in Rome), the Syrian nard, the Syrian *silphion*, the Syrian *magydaris*, the medicinal plants of Commagene, the Transjordanian *myrobalanos*, the balsam of Assyria, Engedi, Jericho, Jerusalem and Petra and the attar of roses from many regions of western Asia.<sup>65</sup>

Strabo, XVII, C 800 § 15: "And here, too, (i. e. in Egypt) certain of those who wished to enhance the revenues adopted the shrewd practice of the Judaeans which the latter had invented in the case of the palm tree (particularly the caryotic palm) and the balsam tree; for they do not allow the byblus to grow in many places, and because of the scarcity they set a higher price on it."

Papyrus also grew in Syrian and Mesopotamian fens. Pliny<sup>66</sup> notes that here as in Egypt it was used as writing material, and papyrus documents from Dura Europos on the Euphrates and from Hafir el 'Auja in the Negeb confirm his statement.

The wealth of the forests of western Asia, especially of the Lebanon region and of north Syria, had been known for thousands of years.

<sup>65</sup> Theophr., *H. Pl.*, IV, 4, 14; IX, 1, 7; 6, 1; Polyb., XXXI, 4, 2; Athen., I, 27 f.; III, 101c; VI, 257e; XV, 689a; Dioscor., I, 18; Tac., *Hist.*, V, 6; Tibull., III, 4, 28; 6, 63; Propert., II, 13, 30; Horat., *Epist.*, II, 2, 184; *Od.*, II, 11, 16; Plut., *Ant.*, 36; Dio Cass., XLIX, 32; Pollux, VI, 104; Strabo, XVI, C 747 § 24; 755 § 16; 763 § 41; Cagnat, *I. G. E. R.*, nr. 1056 IV a; Galen, X, 466; XI, 846; XII, 554; XIII, 568; XIX, 726; 738; Flor., III, 5, 29; Solin., 35, 5-6; Aristid., *Or.* 3, p. 595; Justin., XXXVI, 3; Diod., II, 48; XIX, 98; Joseph., *Bell.*, I, 6, 6, 138; 18, 4/5, 359-362; IV, 8, 3, 469; VII, 6, 3, 178 f.; *Ant.*, IX, 1, 2, 7; XIV, 4, 1, 54; XV, 4, 2, 96; 4, 4, 106; XX, 2, 3, 25; Plin., *N. H.*, XII, 25, 35, 45, 46, 73, 78, 100-102, 104-106, 108, 111-126, 129, 133-135; XIII, 5-7; 12, 15, 26, 28-55, 59, 116, 117; XVI, 135; XIX, 46; XX, 130; XXI, 20, 61, 115, 120; XXIII, 8, 95, 96; XXIV, 69, 85, 164; XXVI, 47; XXVII, 83, 109; XXIX, 55, 56; Loew, I-IV *passim* and especially I, 9 f.; 11 f., 391 f.; III, 388 f.; IV, 57, 60, 93 f., 95 f., 97 f., 103 f.; Krauss, I, 233 f., 687 f. notes 252-264; II, 204; Newman, 103; Goldmann, "Der Oelbau in Palästina in der tannaitischen Zeit," *Monatsschr. Gesch. Wiss. Jud.*, L (1906), 140/1 on *Bab. Shabb.* 26a; 111b; *Bab. Berakh.* 43a; *Bab. Sanh.* 109a; *Pal. Msh.* 5, 1, 55d 71 etc.; *R.-E.*, Art. Balsambaum; Syria, 1560-1562 For *ἀπρίμαρα* see also M 112; 146 (ined.) from Dura.

<sup>66</sup> For Plin., *N. H.*, XIII, 73 see *Econ. Survey*, II, 355; Rostovtzeff, *Soc. and Econ. Hist.*, chapt. V note 35; Welles, *Münch. Beitr. zur Pap. und ant. Rechtsgesch.*, XIX (1934), 379; Welles, "Dura Papyrus 101" (forthcoming in the *Revue d'Hist. du Droit Orient.*, 1938), note 6.

The cedars and cypresses of Lebanon, Amanos, Kasios, and the regions near Damascus and near Batnai, together with their resin and oil, were used in many countries.<sup>67</sup> The wood and the resin of the Syrian terebinth, the best products of which came from the Damascus region,<sup>68</sup> were likewise well known. Other useful trees were the Syrian sumach, the acacia, and especially—all over Syria, Palestine, Babylonia and northern Arabia—the cypress with its valuable wood and resin.<sup>69</sup> Septimius Severus used forest lands near the Euphrates for timber for shipbuilding.<sup>70</sup> The laurel wood near Daphne was famous,<sup>71</sup> but the spruce, fir and plane were very seldom found. Sycamore wood has been found in use in buildings of Dura Europos on the Euphrates.<sup>72</sup> The Talmud gives a considerable amount of information about obtaining and using wood. Woodlands could sometimes be very valuable, and wood was so scarce in Palestine that the Jewish law had good reason for trying to preserve it.<sup>73</sup> In fact, there was a great scarcity of fire-wood in the whole of western Asia. Babylonia was rich only in palmwood.<sup>74</sup> Very often cane had to be used as a substitute. For this reason it was planted profusely on suitable soil, which meant land of high value, in Mesopotamia as well as in the whole of western Asia.<sup>75</sup>

<sup>67</sup> Plin., *N. H.*, XIII, 52, 54; XVI, 52, 55, 197, 203/4; Theophr., *H. Pl.*, III, 2, 6; 15, 3; IV, 5, 5; V, 7, 1; 8, 1; Julian., *Epist.*, 27; Philo Bybl., *F. G. H.*, III, 566b; Euseb., *Praep. Ev.*, I, 10, 9; *R.-E.*, Art. Cypresse, Libanon, Syria, 1559/60; Loew, III, 14 f., 26 f.; Rustum, *Pal. Expl. Quart.*, LIV (1922), 68 f.

<sup>68</sup> Plin., *N. H.*, XIII, 54, XVI, 58, 204/5; M. Mikw. IX 2; Loew, I, 191 f.

<sup>69</sup> Plin., *N. H.*, XIII, 55, XXIV, 129; Loew, I, 200 f. (sumach); Plin., *N. H.*, XIII, 59; Loew, II, 377 f. (acacia); Plin., *N. H.*, XIV, 122; Amm. Marc., XXIV, 63; Strabo, XVI, C 738; 742; Loew, III, 26 f. (cypress, see also note 67). For a *δρυμὸς* near Apollonia (Arsuf) in Palestine see M. Avi-Yonah, *Quart. Dep. Antiq. Pal.*, V (1936), 156.

<sup>70</sup> Dio Cass., 75, 9.

<sup>71</sup> Liban., *Or.* XI, chapters 234 f.; *R.-E.*, Art. Syria, 1559/60.

<sup>72</sup> *Dura Report*, VI, 270; Loew, I, 274 f. For *μέσπιλα* (?) see M 112 (ined.) from Dura.

<sup>73</sup> M. Baba Bathra II 7; M. Mikw. IX 2; Bab. M. Katan 12b; Bab. Nedar. 62b; Galling, *Bibl. Realex.*, Art. Holz und Holzbearbeitung; Dalman, I, 61 f., 73 f., 348 f., 539 f., 567 f.; Krauss, II, 201/2, 585 f. notes 363-375; Newman, 41, 45, 140 f.; Loew, I, 205 f., 266 f., 274 f., 316 f., 322 f.; II, 119 f., 407; III, 33 f., 65 f., 322 f., 399 f., 416 f.; IV, 88 f.; A. Büchler, *Der galiläische Amhaarez* (1906), 195; A. Büchler, *Jews' College Publ.*, IV (1912), 45.

<sup>74</sup> Strabo, XVI, C 739 § 6; Bab. Berakh. 31a. For comparatively expensive *ξύλα* (perhaps fire-wood) see also M 28; 144 + 115 (ined.) from Dura.

<sup>75</sup> Strabo, *loc. cit.*; Plin., *N. H.*, XVI, 159, 160; XXIV, 85; Krauss, II, 200 f., 584 f. notes 354-356; Loew, I, 1 f.; IV, 120 f.

There is much information in our sources about the culture of fruit trees, their varieties and the wealth of their products. Even tree nurseries existed for the purpose of cultivation.<sup>76</sup> The culture of olives<sup>77</sup> and dates was more important in western Asia than in Egypt, for figs were a vital necessity in many regions. In the Gospels, in the Talmud and in other sources there are many allusions to the cultivation of olives, dates and figs.<sup>78</sup> The date-palms of Judaea<sup>79</sup> and especially of Zoar, Jericho,<sup>80</sup> Nimra<sup>81</sup> and Galilee<sup>82</sup> were famous throughout the whole ancient world; so too were the date-palms of Babylonia and Assyria.<sup>83</sup> The Syrian and Phoenician produce was not quite so popular.<sup>84</sup> On the other hand, Syrian figs were so renowned as to be introduced into Italian agriculture in the first century A. D.<sup>85</sup> Of particularly high quality according to the Talmud were the figs of Keila and Bostra,<sup>86</sup> and the fig culture of the region from Lydda to Ono in Palestine was most extensive.<sup>87</sup>

With the exception of those of Damascus, the olives of western Asia were seldom exported.<sup>88</sup> The quantity and quality of the Greek, Italian

<sup>76</sup> M. Msh. V 5; M. Baba Quamma VIII 8; Bab. Baba Quamma 91b; Bab. Baba Mezia 101a; 109b.

<sup>77</sup> Theophr., *H. Pl.*, I, 11, 4; R.-H., Art. Oelbaum, 2001; Oleum.

<sup>78</sup> Krauss, 202 f.; Dalman, I, 56 f., 160 f., 264 f., 378 f., 381 f.; IV, 153 f. *passim*, 385; Newman, 21 f., 81 f., 88, 97 f., 101; F. Goldmann, "Der Oelbau in Palästina in der tannaitischen Zeit," *Monatsschr. Gesch. Wiss. Jud.*, L (1906), 563 f., 707 f.; LI (1907), 17 f., 129 f.; S. Linder, *Palästina-Jahrbuch*, XXVI (1930), 40 f.; Loew, I, 224 f.; II, 287 f., 306 f.; Matth., XXIV, 32; Luke, XIII, 6 f.; XXI, 29 f.; M. Dammai VI 5; Bab. Gitt. 61a; Bab. Erub. 15a; 100a; Bab. Pesach. 88a; Bab. Taanit 29b.

<sup>79</sup> Plin., *N. H.*, XIII, 38, 49; M. Avi-Yonah, *Quart. Dep. Ant. Pal.*, V (1936), 159 (Engaddi), 164 (Jericho, Archelais), 167 (Scythopolis).

<sup>80</sup> Hor., *Epist.*, II, 2, 184; Galen, VI, 607; Plut., *Ant.*, 36; *Tot. Orb. Terr. Descr.* in Müller, *Geogr. Graec. Min.*, II, p. 519 § 31; Dio Cass., 69, 32; Joseph., *Bell.*, I, 6, 6, 138; 18, 4/5, 359 f.; IV, 8, 3, 467 f.; V, 6, 6, 138; *Ant.*, XV, 4, 1/2, 88 f.; 4, 4, 106; XVII, 13, 1, 340; Strabo, XVI, C 763 § 41; M. Sebiith IX 5; Pal. Bikkur. 1, 63d 75.

<sup>81</sup> Krauss, *Lehnwörter*, II, 436.

<sup>82</sup> Joseph., *Bell.*, III, 3, 3, 45; 10, 8, 517.

<sup>83</sup> R.-H., Art. Babylonia, 2713; Plin., *N. H.*, XIII, 28, 36, 39; XV, 115; Strabo, XVI, C 739 § 6; 742 § 14; Bab. Pesach. 87b; Bab. Baba Quamma 58b; 59a; Pal. Yebam. 15, 15a, 16; Bab. Berakh. 31a; Bab. Sotah 46b; Bab. Shabb. 29a; 143a.

<sup>84</sup> Plin., *N. H.*, XIII, 38, 49; Theophr., *H. Pl.*, II, 6, 2; 5, 8; *Caus. Pl.*, II, 3, 7; III, 17, 2; *Tot. Orb. Terr. Descr.*, loc. cit.

<sup>85</sup> Plin., *N. H.*, XIII, 51; XV, 83; Athen., XI, 500 f.

<sup>86</sup> Pal. Bikk. 3, 63c 21; Bab. Joma 67b; Bab. Sanh. 70b; Pal. Demai 2, 122c 36.

<sup>87</sup> Bab. Kethub. 111b finis.

<sup>88</sup> Plin., *N. H.*, XXIII, 96. For the Galilean oil export see Joseph., *Bell.*, II, 21, 2, 591; *Vita*, 13, 74/5; Bab. Men. 85a.

and African produce were all superior. Some olive plantations were found in the neighbourhood of Palmyra;<sup>89</sup> but Palestine could not supply enough olive oil for the needs of its own population, and the Talmud prohibited its export for this reason.<sup>90</sup> Even fewer were the olive plantations of Babylonia.<sup>91</sup> Nevertheless we hear of different varieties of Syrian and Palestinian olives (note 78). The best Palestinian olive oil came from Tekoa in Galilee, and the province as a whole was the most important centre in Palestine for the production of oil. The produce of the neighbourhood of Netafa, Sifkhon, Scythopolis and Gischala was also very popular. Next in importance were the Peraea, including Regeb, and the region of Jerusalem.<sup>92</sup> The Decapolis and the Phoenician coast also were prominent regions of olive cultivation.<sup>93</sup> It should be noted that the comparatively excellent oil mills of the Hellenistic and Roman age were universally used in western Asia of our period.<sup>94</sup>

In Palestine we find Persian nuts,<sup>95</sup> the Crustumenian pears of Italy<sup>96</sup> and many other fruit trees which were introduced in or before the Hellenistic Age.<sup>97</sup> Excellent fruit was grown around Sebastia-Samaria,<sup>98</sup> Ascalon<sup>99</sup> and Scythopolis; in the region of the Lake of Galilee;<sup>100</sup> the country around Beth Gerem in Arabia, Dumask in Mesopotamia, Mehuza, Harpanja and other Babylonian towns; and to

<sup>89</sup> *R.-E.*, Art. Syria, 1560.

<sup>90</sup> See note 12.

<sup>91</sup> *Bab. Chagg.* 25a.

<sup>92</sup> Matth., XXI, 1; Mark, XLIX, 11, 1; Luke, XXI, 37; *Acta Apost.*, I, 12; Joseph., *Bell.*, II, 21, 2, 592; III, 3, 3, 45; 10, 8, 517; *Vita*, 13, 74/6; *Bab. Menach.* 85b; *Bab. Shabb.* 47a; *Bab. Nazir.* 31b; *Bab. Sanh.* 11b; *Bab. Nidda* 6b; *Bab. Chagg.* 25b; *M. Menach.* IX 3; *M. Bikkh.* I 10; *M. Pea* VII 10; *M. Menach.* VIII 3; *Pal. Msh.* 4 E, 54d 54; *Pal. Pea* VII 20a; Goldmann, 568 f.; Cagnat, *I. G. R. R.*, III, nr. 1009 (Capernaum).

<sup>93</sup> Plin., *N. H.*, XV, 15; XV, 32; XXIII, 96.

<sup>94</sup> Cagnat, *I. G. R. R.*, III, nr. 1009; I. G. Duncan, *Pal. Explor. Quart.*, LVIII (1926), 7 f.; E. Grant, *loc. cit.*, 191; *R.-E.*, Art. Syria, 1560, trapetum; Gallinger, *Bibl. Realea.*, Art. Oel; Dalman, IV, 201 f.; Krauss, II, 217 f., 596 f., notes 503-566; Newman, 102/3; M. Avi Yonah, *Quart. Dep. Ant. Pal.*, V (1936), 169.

<sup>95</sup> *M. Kilaim* I 4; *M. Maaseroth* I 2; Loew, II, 32.

<sup>96</sup> Loew, III, 237 f.

<sup>97</sup> *Pal. Berakh.* 2, 5c 5; Loew, II, 29 f., 393 f.; III, 142 f., 159 f., 163 f., 169 f., 212 f., 235 f., 240 f., 278 f., 347 f.; IV, 60, 88 f., 261 f. *passim*, 294 f.

<sup>98</sup> *M. Arakh.* III 2.

<sup>99</sup> *M. Sanh.* 10Eb 111b.

<sup>100</sup> Joseph., *Bell.*, III, 10, 8, 517; *Bab. Erub.* 19a; *Bab. Berakh.* 44a.

the west of the middle Euphrates.<sup>101</sup> The plums of Damascus,<sup>102</sup> the pistachios,<sup>103</sup> the *turbures*<sup>104</sup> and the pears of Syria,<sup>105</sup> the Palestinian and Syrian carobs, and especially the produce from Zalmona and Giduda—the nuts and almonds of Perekh—were quite famous.<sup>106</sup> Fruit-wines and fruit-beers from Syria, Palestine and Babylonia are mentioned in our sources and were known outside their own districts. Perhaps they were exported to some extent.<sup>107</sup> Nut-oil was not valued highly.<sup>108</sup> The technique of fruit culture was elaborated, and tree culture is frequently mentioned in our sources.<sup>109</sup> It is worthy of note that the Talmud considers fruit and date plantations as even more profitable than vineyards.<sup>110</sup> Syrian pears and apples were introduced into the Italian agriculture.<sup>111</sup>

The culture of the vine in Syria, Palestine and Babylonia was very extensive,<sup>112</sup> being generally conducted as in Egypt on large estates which were divided among tenants. In this phase of agricultural activity no less than in the others the Roman and Parthian Near East made full use of the same comparatively advanced methods of cultivation: fertilization and manuring, as well as presses, water machines and the other mechanical inventions of the period.<sup>113</sup>

<sup>101</sup> *Bab. Erub.* 19a.

<sup>102</sup> *Ediot. Diol.*, 6, 86; Galen, VI, 613; Jacoby, *F. Gr. Hist.*, II A, p. 225 (Poseidonius); Athen., II, 49a, XIV, 649a, e; Petron., *Sat.*, 31, 11; Krauss, I, 488 note 554; Loew, I, 198 f.

<sup>103</sup> Plin., *N. H.*, XIII, 51; *Tot. Orb. Terr. Descr.* in Müller, *Geogr. Graec. Min.*, II, p. 519 § 31.

<sup>104</sup> Plin., *N. H.*, XV, 47.

<sup>105</sup> Plin., *N. H.*, XV, 53; Virgil, *Georg.*, II, 88; Columela, V, 10, 18; Juv., XI, 73.

<sup>106</sup> Theophr., *H. Pl.*, IV, 2, 4; *Pal. Orla* 1, 61a 15; *M. Kelim* XVII, 5; *M. Orla* III 7; *Pal. Orla* 63b 4; *Bab. Beza.* 3b; Plin., *N. H.*, XIII, 59, 151; XIV, 103; Loew, II, 393 f.; III, 142 f.; IV, 160.

<sup>107</sup> Plin., *N. H.*, XIV, 103; Loew, I, 91; III, 218; Krauss, II, 245 f.

<sup>108</sup> *M. Shabb.* II 2; Loew, II, 46 f.

<sup>109</sup> Matth., VII, 16-20; XII, 33; *M. Pea* I 5; II 3; *Pal. Pea* 17a 25; Galling, *Bibl. Reallex.*, Art. Baum- und Gartenkultur; Dalman, I, 56 f., 264 f., 376 f., 418 f., 554 f.; Loew, II, 29 f.; Krauss, I, 113 f.; II, 202 f., 569 note 233, 586 f. notes 376-520.

<sup>110</sup> *Bab. Ketub.* 79a.

<sup>111</sup> Plin., *N. H.*, XV, 47; Virgil, *Georg.*, II, 8, 8; Col., V, 10, 18.

<sup>112</sup> Plin., *N. H.*, XIV, 103; Strabo, XV, C 735; XVI, C 752; Newman, 49 f., 93 f.

<sup>113</sup> Matth., IX, 17; Mark, II, 22; Luke, V, 37 f.; Matth., XX, 1 f.; XXI, 28 f., 33 f.; *Pal. Berach.* 5c; Galling, *Bibl. Reallex.*, Art. Baum- und Gartenkultur, Weinbereitung; Krauss, II, 227 f.; Newman, 76 f., 92 f.; Dalman, IV, 291 f. *passim*; 416; Loew, I, 48 f. *passim*; IV, 110 f., 487 f. (conditions of viticulture); *R.-E.*, Art. Syria, 1502; torcular; *Bab. Erub.* 60a; Krauss, II, 163, 203, 206, 208, 214, 227 f., 233 f., 540 note 77, 544 note 104, 545 note 109, 569 note 233; Dalman, IV, 356 f.; Loew,

Famous Mesopotamian wine-producing regions were the lands of Babylon (which also produced good vinegar),<sup>114</sup> Nehar Pania,<sup>115</sup> Sura,<sup>116</sup> the Dura region,<sup>117</sup> Bar Zitai,<sup>118</sup> Kafri,<sup>119</sup> Pumbadita,<sup>120</sup> Pum Nehara, Nehardea<sup>121</sup> and Mehuza.<sup>122</sup> The wines of Laodicea and of Berytus in Syria were well known throughout the whole ancient world.<sup>123</sup> Much popularity was also enjoyed by the wines of Ascalon and Gaza,<sup>124</sup> Androna, Sarepta,<sup>125</sup> Antioch on the Orontes,<sup>126</sup> Seleucia in Pieria,<sup>127</sup> the Bargylos region, Chalybon near Damascus, Arrhai, Kefar Kerme, El Bara, Byblos, Tripolis,<sup>128</sup> the Lebanon district, the Hauran,<sup>129</sup> Apamea<sup>130</sup> and Tyre.<sup>131</sup> In Palestine it was Galilee that produced wines of the best quality and in the largest quantity,<sup>132</sup> but she was not unrivalled. We hear of the region near the Lake Geneza-reth,<sup>133</sup> of Karmel and Saron,<sup>134</sup> Beth Rima and Beth Laban (perhaps in the northern part of the territory of Diospolis-Lydda), Keruchim, Chatulim and Kafar Sigma (the exact situation of these villages has not been ascertained),<sup>135</sup> Kefar Aziz, Perugitha,<sup>136</sup> Tiberias, Caesarea,

I, 64 f., 68 f.; R. W. Hamilton, *Quart. Depart. Antiq. Palest.*, IV (1935), 111 f. (machines and technique); Dura Pg. 23 (Ληνὼν).

<sup>114</sup> Strabo, XVI, C 742 § 14; Athen., I, 32b; Philostr., I, 21; Amm. Marc., XXIV, 3, 12; *Bab. Erub.* 60a.

<sup>115</sup> *Bab. Gitt.* 65b; *Pal. Gitt.* VI 48a 58.

<sup>116</sup> *Bab. Berakh.* 5b.

<sup>117</sup> *Dura Rep.*, IV, 122/23 nr. 245 = *S. E. G.*, VII, 401; Dura Pg. 2, 5; 23; M. 28; 143; 144 + 115 (ined.).

<sup>118</sup> *Bab. M. Katan* 4b.

<sup>119</sup> *Bab. Erub.* 24b.

<sup>120</sup> *Bab. Baba Quamma* 92a.

<sup>121</sup> *Bab. Ab. Zara* 47b; 78a.

<sup>122</sup> *Bab. Baba Bathra* 24b; *Bab. Shabb.* 109a; *Bab. Ab. Zara* 47b, 78a.

<sup>123</sup> Strabo, XVI, C 751 § 9; Plin., *N. H.*, XIV, 74; XV, 66; *Periplus mar. Erythr.*, 6, 49, *Geogr. Graeco. Min.*, I, 293; Alex. Trall., II, p. 483.

<sup>124</sup> *Tot. Orb. Terr. Descr.* in Müller, *Geogr. Graeco. Min.*, II, p. 518 § 29; M. *Baba Bathra* VI 2; Sid. Apoll., *Carm.*, XVII, 1 a, 5; Isid., *Orig.*, XX, 3, 7; Oribas., I, p. 433; Pap. Ox. 1924.

<sup>125</sup> *R.-E.*, Art. Syria, 1677/8; Alex. Trall., I, p. 335, 483; II, p. 217, 325, 407; Sid. Apoll., *Carm.*, XVII, 16. See also chapter III § II note 54.

<sup>126</sup> Liban., *Or.* 11, chapter 23.

<sup>127</sup> Strabo, VII, 316 § 8.

<sup>128</sup> *R.-E.*, Art. Syria, 1561/62; on Strabo, XV, 735 § 22; Athen., I, 28 d, 29 b; C. I. G., III, 9612; Migne, *Patr.*, LXXXVI, II, col. 3149, Syriac and Arabic authors.

<sup>129</sup> Loew, I, 56/7; Plin., *N. H.*, XIV, 22.

<sup>130</sup> S. H. A., *Elagabal.*, 21; Le Bas-Waddington, III, nr. 2644.

<sup>131</sup> Plin., *N. H.*, XIV, 74; *Bab. Ab. Zara* 34b; Alex. Trall., II, p. 327, 407, 457, 485, 495.

<sup>132</sup> Joseph., *Bell.*, III, 3, 3, 45.

<sup>133</sup> Joseph., *Bell.*, III, 10, 8, 519.

<sup>134</sup> M. *Baba Bathra* VI 2; M. *Nidda* II 7; M. *Pesach.* VII 13.

<sup>135</sup> M. *Menaah.* VIII 11; M. Avi-Yonah, *Quart. Dep. Ant. Pal.*, V (1936), 15.

<sup>136</sup> M. *Kil.* VI 3; *Bab. Shabb.* 147b.

Sepphoris<sup>137</sup> and of Samaria-Sebaste.<sup>138</sup> The wine of Ammon was much appreciated.<sup>139</sup> A Greek inscription which contains a fragment of a vineyard law reveals that the culture of the vine was very important near Gerasa in the Hauran region.<sup>140</sup> Edom in the south of Transjordan was distinguished for its production of vinegar but had no good wines.<sup>141</sup> Nevertheless, Palestine was not a wine-exporting country.<sup>142</sup> Indeed, a piece of second century evidence informs us that wine was cheaper in Tyre than in Palestine.<sup>143</sup> To prevent scarcity Talmudic authorities forbade the export from Palestine of wine as of flour and olive oil.<sup>144</sup> In forbidding this export, however, the authorities did not show the same unanimity as in the case of the two latter products. Babylonia also did not grow enough vines to satisfy the needs of its population.<sup>145</sup> Syrian wines were the only ones which were imported by all countries of the ancient world; and Syrian vines, especially from Laodicea, were cultivated even in Italy.<sup>146</sup>

## ii. Irrigation

Only in the Mesopotamian region were the water conditions of the Roman Near East similar to those of the province of Egypt.<sup>1</sup> Irrigation in Syria, Palestine and Transjordan was much more dependent upon the rainfall than upon the artificial canalization of streams.<sup>2</sup> Their climatic conditions, however, necessitated the extensive use of artificial irrigation in other forms: all the rivulets and rivers had to be diverted by canals and trenches to bodies of water of as great an acreage as possible. Dams were not seldom built to increase the volume

<sup>137</sup> *Pal. Meg.* I E 72d 61.

<sup>138</sup> *Pal. Ab. Zara* V 44d 35; V 4, 44d 50; *M. Dem.* VII 4; *Bab. Hulla* 6a; Loew, I, 114.

<sup>139</sup> *Pal. Sanh.* X 28d 13. b. 106a; Loew, I, 56.

<sup>140</sup> Cagnat, *I. G. R. R.*, III, 1341; Loew, I, 52 f., 56 f.

<sup>141</sup> *M. Pesach.* III 1; *Bab. Pesach.* 43b; *Pal. Pesach.* III 29d 43; Loew, I, 104.

<sup>142</sup> Dalman, IV, 407.

<sup>143</sup> *Bab. Ab. Zara* 34b.

<sup>144</sup> *Bab. Baba Bathra* 91a; Loew, I, 124/25.

<sup>145</sup> *Bab. Pesach.* 107a.

<sup>146</sup> *Plin., N. H.*, XIV, 41; XV, 86.

<sup>1</sup> Newman, 17-8 on the Talmudic evidence; Welles, "Dura Papyrus 101" (forthcoming in the *Revue d'Hist. du Droit Orient.*, 1938), notes 19-22, 27, 32 on the Chabur region in northern Mesopotamia. For Parthian Babylonia see also note 33 and R. J. Forbes, *Jaarbericht Ex Oriente Lux*, V (1937).

<sup>2</sup> For Palestine see Dalman, I, 70 f., 115 f., 172 f., 291 f., 524 f.; II, 29 f., 219 f.; Krauss, II, 163 f.; Vogelstein, 10 f.

of water which could be used; artificial wells were constructed for agricultural and for drinking purposes; underground tunnels and aqueducts transported the water to places where the natural resources were deficient. The agriculture of a large part of Transjordan and of other districts near the Arabian desert was dependent on the use of cisterns. Large reservoirs collected, if necessary for years, the irregular but sometimes very heavy rainfall of these regions. The destruction of these reservoirs finally rendered the country uninhabitable.

We hear of the artificial irrigation of many districts in the Roman Near East of our period: this holds for the Palestinian regions near Sepphoris,<sup>3</sup> Jericho,<sup>4</sup> Caesarea,<sup>5</sup> Kallirrhoe,<sup>6</sup> Gezer<sup>7</sup> and the shores of the Lake of Tiberias.<sup>8</sup> Jerusalem and the whole of Palestine abounded in moles, dams, aqueducts, and old and new cisterns.<sup>9</sup> Pilate drew upon the treasury of the Jewish temple to build an aqueduct leading to Jerusalem.<sup>10</sup>

Of the regions which had to be artificially irrigated the most important in Syria were situated near Damascus,<sup>11</sup> Emesa,<sup>12</sup> Heliopolis,<sup>13</sup>

<sup>3</sup> *R.-E.*, Art. s. v.; *M. Menach.* X 8; *M. Avi-Yonah*, *op. cit.*, 169.

<sup>4</sup> *Strabo*, XVI, C 763 § 41; *Joseph.*, *Bell.*, IV, 8, 3, 465, 467; *Ant.*, XVII, 13, 1, 340; *R.-E.*, Art. s. v. and Art. Herodes (Suppl. II, 91/2, 198); *Avi-Yonah*, 164.

<sup>5</sup> O. H. Knight, *Pal. Expl. Quart.*, LII (1920), 79 f.; *R.-E.*, Art. Caesarea nr. 10; *Avi-Yonah*, 150-1; A. Schenk von Stauffenberg, *Die römische Kaiser Geschichte bei Malalas* (1931), Index s. v. Caesarea.

<sup>6</sup> *R.-E.*, Art. s. v.; *Krauss*, I, 215 f.

<sup>7</sup> E. W. G. Masterman, *Pal. Expl. Quart.*, LXVI (1934), 140.

<sup>8</sup> J. G. Duncan, *Pal. Expl. Quart.*, LVIII (1926), 20 f.; *Krauss*, I, 215 f., 227 f.; *Avi-Yonah*, 173/4.

<sup>9</sup> *R.-E.*, Art. Jerusalem, 931, 944, 950; F. I. Hollis, *The Archaeology of Herod's Temple* (1934), 61 f., 69 f., 81 f., 90 f., 95 f., 348; D. C. Baramki, *Quart. Depart. Antiq. Pal.*, IV (1935), 165 f. and *ibid.*, V (1936), 3 f.; *Vogelstein*, *loc. cit.* For the Negeb near Sbeita and Hafir el 'Auja see note 31. See also notes 3-8 and especially *Avi-Yonah*, 144 (Akko), 145 (Efa), 146 (et Tire), 146 (Jerusalem), 149 (Hyrkania), 150 (Ain Hanniya), 151 (Kabara), 153 (Aeneam), 155 (Emmaus), 158 (Eleutheropolis), 159 (Engaddi), 161 (Nablus, Alexandrium), 163 (Samaria), 164 (Neara, Kh. Qumran), 167 (Scythopolis, Abelmea), 168 (Aenon, Kh. Buqua, Bethmaula, Emmatha), 170 (Chabulon), 175 (Hippos), 176 (Ad Diaram), 177 (Mampsis, Quasar Umm Gagheq), 178 (Byer).

<sup>10</sup> *Joseph.*, *Bell.*, II, 9, 4, 175; *Ant.*, XVIII, 3, 2, 60.

<sup>11</sup> *R.-E.*, Art. s. v.; E. W. G. Masterman, *Pal. Expl. Quart.*, LII (1920), 181 f.; R. Thoumin, *Bull. d'Études Orientales*, IV (1935), 1 f.

<sup>12</sup> R. Dussaud, *Monum. et Mém.*, XXV (1921/22), 133 f.; L. Brossé, *Syria*, IV (1923), 234 f.; *R.-E.*, Art. Syria, 1617, 1694/5; *Schenk von Stauffenberg*, *op. cit.*, Index s. v. Emesa.

<sup>13</sup> A. Wilhelm, *Nachr. Gesell. Göttingen Fachgr.*, I, N. F., 1, 4 (1935), 91 f.; Th. Wiegand, *Baalbek*, I (1921), 22 f.; III (1925), 95.



Kasr el Heir,<sup>14</sup> the Chrysorroas region,<sup>15</sup> Antioch on the Orontes,<sup>16</sup> Laodicea, Aleppo, Berytus,<sup>17</sup> Nicopolis<sup>18</sup> and Tyre.<sup>19</sup> From the first century A. D. up to the time of Diocletian the lower courses of the rivers near the rich seaport of Seleuceia in Pieria were always being canalized for shipping and irrigation:<sup>20</sup> Trajan built a port on the river for the great Antioch;<sup>20</sup> Diocletian enlarged a great lake reservoir near Emesa (see note 12).

In Transjordan, as well as in the Hauran district, there were similar irrigation works of Roman date near Bostra,<sup>21</sup> Kanata (where an aqueduct of the time of Trajan was especially important),<sup>22</sup> Suweida,<sup>23</sup> Arra,<sup>24</sup> Gadara,<sup>25</sup> Safa,<sup>26</sup> Gerasa,<sup>27</sup> the oasis of Palmyra,<sup>28</sup> Petra<sup>29</sup> and elsewhere.<sup>30</sup> The dependence of these regions on the use of their cisterns, reservoirs and tanks is illustrated by some very interesting ostraca from Sbeitah in the Negeb in the old Nabataean kingdom.<sup>31</sup>

<sup>14</sup> H. Seyrig, *Syria*, XV (1934), 24 f.

<sup>15</sup> Strabo, XVI, C 755 § 16.

<sup>16</sup> Liban., *Antioch*. (Or. 11), chapters 27, 28, 100 f., 250 f.; Malal., IX, 217; 243; XI, 276; 278/9; Schenk von Stauffenberg, *op. cit.*, Index s. v. Antiochien, Daphne.

<sup>17</sup> R.-E., Art. Berytos; Bouchier, *Syria as a Rom. Prov.*, 117; S. Mazloum, *L'ancienne canalisation d'eau d'Alep* (1936); Schenk von Stauffenberg, *op. cit.*; Index s. v. Laodikeia.

<sup>18</sup> For *CIL*, III, Suppl. I, nr. 6703 see R.-E., Art. Syria, 1627; Jalabert-Mouterde, *Inscriptions Grecques et Latines de la Syrie*, nr. 164.

<sup>19</sup> *Pal. Sebith* 6, 1, 3, 6d 47; Krauss, II, 547.

<sup>20</sup> R.-E., Art. Seleukeia, 1191.

<sup>21</sup> Cagnat, *I. G. R. R.*, III, 1317:

Kréyé.

"To good luck. This reservoir has been built in the year 190 (= 294/5 A. D.) out of common funds of this village for 150,000 denarii, thanks to the forethought of Flavius Cornelianus, the *principilarius*."

<sup>22</sup> A. H. M. Jones, *The Cities of the Eastern Roman Provinces* (1937), 293; M. Dunand, *Syria*, XI (1930), 272 f.; *O. G. I. S.*, II, 618 = Cagnat, 1291; Le Bas-Waddington, III, 2301; *S. E. G.*, VII, 977/8, 1143, 1148; *Année épigr.*, 1936, nr. 146 = *S. E. G.*, VII, 969.

<sup>23</sup> Cagnat, III, 1273; A. H. M. Jones, *loc. cit.*

<sup>24</sup> Cagnat, III, 1289; *S. E. G.*, VII, 976.

<sup>25</sup> Krauss, I, 215 f.; R.-E., Art. Amathe, nr. 1; Gadara, nr. 1.

<sup>26</sup> Cagnat, III, nr. 1338.

<sup>27</sup> *Année épigr.* (1930), nr. 100 a; *S. E. G.*, VII, 866.

<sup>28</sup> R.-E., Art. Syria, 1559; D. Schlumberger, *Berytus*, II (1935), 155 f.; *O. I. S.*, II, 3, I nr. 3913; *S. E. G.*, VII, 152; *O. G. I. S.*, 634.

<sup>29</sup> A. B. W. Kennedy, *Petra* (1925), Index s. v. Cisterns, Reservoirs and tanks; *O. I. S.*, II, 1, nr. 350.

<sup>30</sup> Le Bas-Waddington, III, nr. 1963 = *S. E. G.*, VII, 1154; Gallig, *Bibl. Reallew.*, Art. Wasserversorgung, Zisterne; Krauss, II, 164 f., 547 f.; G. M. Harper, *Yale Class. Stud.*, I (1928), 150 f.; Dura Pg. 8.

<sup>31</sup> H. C. Youtie, "Ostraca from Sbeitah," *Am. Journ. Arch.*, XL (1936), 452 f.

Ostr. Sbeitah I:

Sixth century A. D.

"To Flavius Gormos, son of Zacharias: You have completed one compulsory 'work' for the cistern. Written on the 25th of the month of Dios in the 9th indiction."

They show that compulsory labour was organized by the state in the sixth century A. D. for the proper maintenance and repair of the irrigation systems. The documents, receipts for "ἔργα" connected with the cisterns, are analogous to the Egyptian documents for excavation of "naubia" (*Econ. Surv.*, II, 12 f., 20 f.). It is mere chance that the extant ostraca of this type refer to the Byzantine age; by similar chance we might discover in the future documents of the same significance referring to the Hellenistic centuries or to the period of the Principate.

Of all regions in the Roman Near East Mesopotamia required the most canals and irrigation works capable of fertilizing large tracts of land near its rivers and sometimes in the desert. All states founded in these regions—from the Sumerian monarchies to the Seleucids, the Parthians and the Sassanians—regarded as their first duty the proper maintenance of the system of canals. It often happened that private canals were built in addition to those belonging to the state. That Roman *veterani* cultivated land which was irrigated by a canal at Dura close to the *limes* is revealed in the very interesting Dura papyrus 101 of 227 A. D. (see note 1). Trajan, Septimius Severus and Julianus ordered the repair of important parts of the famous King Canal of Mesopotamia.<sup>32</sup> In the regions of Babylonia ruled by the Parthian and Sassanian Empires there was, as is shown in the Talmud, continuous state control of the irrigation system and dam corvées similar to those of Egypt and Transjordan.<sup>33</sup> Some forms of official irriga-

Similar evidence is to be expected from Aramaic ostraca of the Nabataean period and from a large quantity of invaluable Byzantine papyri found at Hafir el 'Auja in the same region by the Colt Expedition. (See *Am. Journ. Arch.*, XL [1936], 133 [great system of reservoirs and canals near Sbeitah], 160 f. [two large reservoirs and a bath excavated], 249; XLI [1937], 149; Preisigke, *S. B.*, III, 7011/2 [Papyrus from Hafir el 'Auja].)

<sup>32</sup> *Amm. Marc.*, XXIV, 6, 1/2; *Zosim.*, III, 24; *Liban., Or.*, 18, p. 604 = II, 343, 5.

<sup>33</sup> *Strabo*, XVI, C 738 § 5; 739-742 §§ 9-13; 747 § 27; *Bab. Taan.* 10a; 11b; 12b; 22b; *Bab. Shabb.* 81a; *Bab. Mk.* 4a; *Bab. Baba Mezia* 24b; 66b; 77a; 103a; b; 106b; 107b; 108a; *Bab. Gitt.* 60b; 74b; *Bab. Baba Bathra* 12a; b; 13a; 41a; 91b; 94b; *Bab. Chull.* 107a; *Bab. Erub.* 21a; 104b; *Bab. Baba Quamma* 27b; *Bab. Kidd.* 76b; *Bab. M. Katan* 2a; 4a; b; *Bab. Pesach.* 54b; *R.-E.*, Art. Assyria, Babylonia, Mesopotamien, Seleukeia; Newman, 17/8, 82 f.; Krauss, II, 164 f., 547 f.

tion control must have existed in the Roman province of Mesopotamia as well, and the future may bring to light documents indicating such a state of affairs.

### iii. *Classification, Survey and Inspection of Land*

In the Roman Near East land was classified in various ways, depending on the quality of the soil or the conditions of tenure. According to the Mishnah Palestine was primarily divided into mountain land, hill land and plain land.<sup>1</sup> Here and in Babylonia as well a distinction was drawn between excellent, mediocre and bad arable land;<sup>2</sup> good and bad tree land;<sup>3</sup> rocky land;<sup>4</sup> and soil formed by pulverized rock,<sup>5</sup> loam,<sup>6</sup> clay,<sup>7</sup> or sand.<sup>8</sup> In respect to irrigation over-wet,<sup>9</sup> over-dry<sup>10</sup> and artificially irrigated ground,<sup>11</sup> corresponding to the Egyptian terms καθ' ὑδατος, ἄβροχος and ἐπηντιλημένη, were distinguished from the so-called Baal's fields which needed only "Jupiter Pluvius," as the Romans would put it.<sup>12</sup> Another system of division included plough land, gardens, orchards, vineyards, plantations, olive-, date-, pomegranate-, rose-, balsam-, sesame-, saffron-, flax-, and (in Babylonia) cuscuta-fields, artificial and natural reed-banks, sown and natural lawn, wood and bushland.<sup>13</sup>

One cannot say without special research whether these numerous Talmudic divisions accord with the terminology of Hellenistic or Roman land registers which must have existed in Ptolemaic, Seleucid, Maccabaeen and Roman Palestine in Greek, Latin and perhaps Aramaic. But there are certain features corresponding not only to Ptolemaic and Roman Egypt (see note 11) but also to the Kautilya Arthashastra of Hellenistic India which seem to show Seleucid influence to a certain extent.<sup>14</sup>

<sup>1</sup> Dalman, II, 1 f., 14 f.; Krauss, II, 157, 537/8; M. Sebith IX 9; M. Kethub XIII 10; M. Baba Bathra III 2.

<sup>2</sup> M. Gitt. V 1.

<sup>3</sup> M. Orla I 5.

<sup>4</sup> M. Orla I 3; Bab. Pesach. 47b.

<sup>5</sup> Krauss, II, 159, 540/1.

<sup>6</sup> See note 5.

<sup>7</sup> Pal. Challa I 57c 29; Bab. Pesach. 47b; 55a; M. Ohal. XVII 4.

<sup>8</sup> M. Ohal. XVII 4.

<sup>9</sup> Bab. Pesach. 47b.

<sup>10</sup> Bab. Mk. 6b.

<sup>11</sup> Bab. Mk. 6b and for the whole classification system, Krauss, II, 164 f., 547 f.

<sup>12</sup> Krauss, II, 164, 546; Newman, chapter VI.

<sup>13</sup> Krauss, II, 164 f., 547 f.; Newman, *ibid.*

<sup>14</sup> For land registries in Palestine see G. J. Webber, *Journ. Comparat. Legislation*, 3rd ser., XV (1933), 105 f.; for Hellenistic India see F. M. Heichelheim, "New Light

In the division according to land tenure we find γῆ κληρουχική (?)<sup>15</sup> and γῆ ἐπιφυτευτική.<sup>16</sup> The great number of Roman *veterani* in the Roman Near East suggests extensive assignments of land.<sup>17</sup> Γῆ ἱερὰ was found in various regions.<sup>18</sup> Imperial estates are mentioned in Palestine after Augustus<sup>19</sup> and in many other parts of the country between the Mediterranean and the Tigris.<sup>20</sup> Analogies to the Egyptian πολιτικαὶ οὐσίαι are also found.<sup>21</sup> Finally we have certain proof that official registration, declaration and sometimes inspection of land<sup>22</sup> was practised from the time of Augustus, at least on ordinary provincial soil. The register of landowners and imposed taxes in the

on the Influence of Hellenistic Financial Administration in the Near East and India," *Economic History* (1938), 3 f. In *Kaut.*, II, chapter 15 the unique division into excellent, mediocre and bad arable land of M. Gitt. V 1 is found (see note 2), a division not common in Hellenistic administration.

<sup>15</sup> For Μακεδόνες in Commagene see Joseph., *Bell.*, V, 11, 3, 460; 463; 465, in Gerasa *S. E. G.*, VII, 892; 923, in Dura M. Rostovtzeff, *Journ. Hell. Stud.*, LV (1935), 58 f.

<sup>16</sup> Dura Perg. 23. For a Jewish *emphyteuta* see G. J. Webber, *Journ. Comparat. Legislation*, 3rd ser., XV (1933), 111.

<sup>17</sup> Rostovtzeff, *S. E. H. R. E.*, chapter VII notes 30 and 33; *S. E. G.*, VIII, 11; Cagnat, III, nr. 1007, 1022, 1091, 1104, 1110, 1135, 1159, 1170, 1179, 1183, 1187, 1188, 1193, 1213, 1216, 1218, 1233, 1234, 1246, 1249, 1265, 1266, 1267, 1271, 1294, 1298, 1299, 1301, 1302, 1305, 1309, 1310, 1312, 1313, 1316, 1336, 1340; Jalabert-Mouterde, *Inscr. Grecques et Latines de la Syrie*, I, nr. 181; A. H. M. Jones, *The Cities of the Eastern Roman Provinces* (1937), 267 f., 271 f., 278 f., 284 f., 291 f.; Dessau, *op. cit.*, II, 2, 629 f.; *R.-E.*, Art. Ammaus, nr. 2.

<sup>18</sup> Jalabert-Mouterde, I, 1, 1. 191 f. (Commagene); Rostovtzeff, *op. cit.*, chapter VII note 26 (Baitokaïke).

<sup>19</sup> Joseph., *Ant.*, XVII, 11, 4/5, 317/23; XVIII, 2, 3, 31; 6, 3, 158; *Bell.*, II, 9, 1, 167; VII, 6, 6, 216/8; *Vita*, 13, 71; 76; 422; 425; 429; Plin., *N. H.*, XII, 111, 113, 118, 123; *Bab. Gitt.* 55b f. *passim*; *Pal. Gitt.* V 47b, 11; Euseb., *Hist. Eocl.*, IV, 6, 1; *Pal. Taan.* IV 69a 18 (Hadrian's vineyard); *Bab. Sukk.* 29a, b; Marquard, *Römische Staatsverwaltung*, II (2nd edition), p. 256; Rostovtzeff, *op. cit.*, chapter VII note 30; A. Büchler, *The Economic Conditions of Judaea after the Destruction of the Second Temple*, *Jews' College Publ.*, IV (1912), 29 f.; Krauss, I, 234 f.; *R.-E.*, Suppl. II, Art. Herodes, 199; M. Avi-Yonah, *Quart. Dep. Ant. Pal.*, V (1936), 154, 158, 164, 166, 172, 175.

<sup>20</sup> Marquard, *loc. cit.*; Rostovtzeff, "Studien zur Geschichte des römischen Kolonates," *Arch. f. Pap.*, Suppl. I (1910), 303/4; *O. G. I. S.*, 609; *R.-E.*, Art. Libanon; A. Rustum, *Pal. Expl. Quart.*, LIV (1922), 68 f.

<sup>21</sup> For Antioch and Palmyra see Rostovtzeff, *Social and Economic History*, chapter VII notes 19 and 27; for villages and towns see G. M. Harper, *Yale Class. Stud.*, I (1928), 151 f., 154 f.

<sup>22</sup> See also *Année épigr.*, 1907, nr. 145; 1933, nr. 144, 145 (= *S. E. G.*, VII, 247; 248); 1936, nr. 145; Cagnat, III, nr. 1002, 1112, 1252, 1278, 1542; M. Dunand, *Le Musée de Soueïda* (1934), 75 f.; *R.-E.*, Art. Kataster, Limitatio, Syria, 1694; A. Déléage, *Études de Papyrologie*, II (1934), 147 f.; *S. E. G.*, VII, 1063; *O. G. I. S.*, 612.

centuries of the Principate was in the end superseded by the new universal register which Diocletian introduced into the whole of the Empire. His Syrian registration is mentioned in several inscriptions.

Euseb., *Hist. Eccl.*, III, 20: "Hegesippus relates . . . : 'Now there still survived of the family of the Lord, grandsons of Judas who were said to have been His brothers (or cousins. 'Ἀδελφός had both meanings at the time of the Gospels; see Adler Pap., 7-8, and the unpublished Pap. Lond. Inv. Nr. 2850 for the second meaning) according to the flesh, and they were delated as being of the family of David. These the evocatus brought to Domitian Caesar. . . . He asked them if they were of the house of David, and they admitted it. Then he asked them how much property they had and how much money they controlled, and they said that all they possessed were nine thousand denarii between them, the half belonging to each; and they also stated that they did not possess this in money but that it was the valuation (δυσάρησις) of only thirty-nine plethra of ground on which they paid taxes and lived on it by their own work.'"

Cagnat, *I. G. R. R.*, III, 1142: "Our Lords, the Augusti Diocletian and Maximian, and the Caesars Constantius and Maximian have ordered that the boundaries of the mother village 'Acrabe and Asichae' should be defined. (The work has been executed) under the care of L. Caiamus, the *censitor*."

#### iv. *Leases of Land, Sales and Mortgages of Land*

We find numerous estates in the Roman Near East under a single administration which were more generally worked by tenants or serfs than by hired labourers and slaves.<sup>1</sup> There is frequent mention of such private estates and their organization in all our authorities, espe-

<sup>1</sup> Joseph., *Vita*, 9, 33; 23, 112/3; 24, 119; 76, 422; 425; 429; Matth., XX, 1 f.; XXI, 28 f.; 33 f.; Mark, XII, 1 f.; XIII, 34 f.; Luke, XX, 9 f.; Rostovtzeff, *Soc. and Econ. Hist.*, chapter VII notes 20, 21, 25, 30; Galling, *Bibl. Reallew.*, Art. Ackerwirtschaft; A. Büchler, *Der galil. Amhaarez des 2. Jahrh.* (1906), 32 f., 247 f., 255 f.; A. Büchler, *The Political and Social Leaders of the Jewish Community of Sepphoris in the Second and Third Cent.*, *Jews' Coll. Publ.*, I (1909), 34 f.; A. Büchler, *The Economic Conditions of Judaea after the Destruction of the Second Temple*, *Jews' Coll. Publ.*, IV (1912), 30 f.; Newman, 25 f., 33 f., 36 f., 39, 43, chapters III and IV *passim*, 84, 86 f., 110/1, 117 f., Index, s.v. Abaye, Abba b. Abba, R. Ashi, R. Bibi b. Abaye, R. Daniel, Exilarch(!), R. Hisda, R. Huna-R. Huna b. Joshua, R. Joseph, R. Judah, Landowners(!), b. Mar Samuel, Mari b. Isak, R. Nahman, R. Nahman b. Papa, R. Papa, R. Papa b. Samuel, Rab, Raba, Rabba b. Huna, Rabina, Samuel; Krauss, II, 101 f., 105 f., 108 f., 140 f.; 187. For the late Roman period see I. Ziegler, *Die Königsgleichnisse des Midrasch* (1903), 253 f., 261 f., 286 f.; M. Rostovtzeff, *S. E. H. R. E.*, chapter VII notes 19-24; G. M. Harper, *Yale Class. Stud.*, I (1928), 162 f.

cially in the Gospels and the Talmud. Here we can note only a few characteristic details.

The estates were not administered exclusively on an agricultural basis: they contained workshops, the products of which—such as pottery, beer, etc.—were not only used for domestic purposes but were sold on the market or to merchants.<sup>2</sup> Both seed and money were frequently borrowed from the estate owners and their administrators, and the income from such loans was not seldom of great importance to them.<sup>3</sup> As in the organization of estates in the Latin and Greek speaking world, two types of hired labourers occur, the ἐργάται = *operarii* (probably “paid by task” [= ἔργον]) and the μισθωταὶ = *mercenarii* (probably “paid by time”). We find in the Talmud that the two completely analogous professions of the *sachir* and the *poel* were employed on Palestinian and Babylonian estates. The Hellenistic term μισθωτής in its wider significance (= Latin *conductor*, *colonus*, as well as *partiarius*) has also its counterpart in the Aramaic *kablan*, which is etymologically analogous and parallel in meaning.<sup>4</sup> In addition to other evidence the Greek and Aramaic languages<sup>5</sup> attest that the μισθωταὶ (= *kablanim* and *sachirim*), i. e. a large group of hired agricultural labourers of the Hellenistic and Aramaic East, were very often also small tenants. At the same time the estates employed specialized agricultural workers as tenants, whose names in Aramaic have also close Latin and Greek analogies with little variation in meaning.<sup>6</sup> We find different types of tenants. One is the *aris* (= gardener), who is substantially the same as the Greek μέτοχος and the Latin *partiarius*; he was a free worker whose wage consisted in a certain part

<sup>2</sup> Newman, Index s. v. R. Hisda, R. Papa and p. 34 f., 37 f., 43, 102; *Bab. Baba Mezia* 42a.

<sup>3</sup> D. J. Herz, *Palästina-Jahrbuch*, XXIV (1928), 28 f.; see M. Rostovtzeff, *op. cit.*, chapter VII note 22 and G. Mickwitz, *Geld und Wirtschaft im röm. Reich des IV Jahrh. n. Chr.*, *Soc. Scient. Fenn. Comment. Hum. Litt.*, IV, 2 (1932), 183 for the period of St. John Chrysostom.

<sup>4</sup> For the Talmudic passages referring to the three expressions see Krauss, II, 102 f.; Newman, 63 f., who do not notice the analogy to contemporary Greek and Latin. For ἔργον see § II. For the late Roman period see I. Ziegler, *Die Königs-gleichnisse des Midrasch* (1903), 258 f., 300 f.

<sup>5</sup> Krauss, II, 102, 108 f.

<sup>6</sup> For the Talmudic passages which are of great importance for the problems of land tenure in Palestine and Babylonia see Newman, 54 f.; Krauss, II, 109 f.; G. J. Webber, *Journ. Compar. Legislation*, 3rd ser., XV (1933), 110 f.; I. Herzog, *Main Institutions of Jewish Law*, I (1936), 329 f.

of the harvest. Less frequently the *hoker* was employed, i. e. a tenant with a fixed rent (= Latin *conductor*, Byzantine ἐκλήμπτωρ and Greek μισθωτής in its wider sense). The last and most important type of tenant in the Near East was the *shatla* (= planter or worker). This Aramaic expression is identical in meaning and in etymology with the Greek term γεωργός and the Latin term *colonus*, which we also find in the Roman Near East.<sup>7</sup> Here, as with many of the other agricultural terms which we mentioned previously, an Aramaic translation of a Hellenistic term is in the present writer's opinion very probable.

The "planters" = *coloni* = γεωργοὶ were as free during the period of the Principate as the other types of tenants mentioned in the Talmud, but as a rule there was no limit to the time of employment. The *shatla* remained for life unless he was dismissed for some particular reason or gave notice to the landlord. He was legally entitled to leave after four years and to claim compensation for improved value; but a son usually succeeded his father.

The *aris* sometimes worked on a larger scale. He could move from one farm to another after a fixed time, and in working large holdings he employed sub-tenants. The *aris* = *partiarius* = μέτοχος was the most suitable type of farmer for untilled or undercultivated soil needing capital for its development. We may be certain that the Roman *veterani* levied from the whole Empire, who formed a village aristocracy throughout the entire Roman Near East,<sup>8</sup> could only derive their large incomes from the extensive tracts given to them by the government through the employment of contractors fully acquainted with the nature of the country. As we see from the Talmud, the *aris* in Roman as well as in Sassanian territory was more firmly bound by his landlord from the third century A. D. The contract was often extended for life, and in the end the professions of the *shatla*, the *hoker* and of the *aris* became more or less hereditary. This is of course a familiar development in the feudal system which finally spread throughout the whole of the ancient world.

<sup>7</sup> Matth., XXI, 33 f.; 38; 40 f.; Mark, XII, 1 f.; 7; 9; Luke, XX, 9 f.; 14; 16; John, XV, 1; O. G. I. S., 588 = Cagnat, nr. 1055, 1012, 1154; F. Rosenthal, *Mitt. Vorderas.-Aeg. Ges.*, XLI, 1 (1936), 92. For the *colonus* of Syria and Palestine during the late Roman period see M. Rostovtzeff, *S. E. H. R. E.*, chapter VII notes 19-24; G. M. Harper, *Yale Class. Stud.*, I (1928), 162 f.; I. Ziegler, 253 f., 300 f.

<sup>8</sup> Rostovtzeff, *S. E. H. R. E.*, chapter VII note 33.

But even earlier the power of the landlord was very great in the Eastern region. He decided the time of the harvest and was often involved in quarrels with his tenants on this account. The tenants usually preferred a late harvest in order that their share of the produce might be as large as possible, for this payment in kind was their sole means of subsistence. A premature harvest, however, was often an advantage to the landlord, who as a marketer preferred high prices to a plentiful crop. If the tenant wanted a late harvest he had sometimes to compensate the landlord.<sup>9</sup>

We know little about the price of land in the Roman Near East. A vineyard in Kurdistan east of the Roman frontier in 23/22 B. C. costs only 80% of the prices in 43/44 A. D. and 52/53 A. D. This change may have been due to the peace which Augustus restored between Rome and Parthia and, if this supposition be correct, may have been caused by changes in Roman territory.<sup>10</sup> It is not surprising to find that an excellent olive grove in Antioch on the Orontes, which is supposed to have been bought in Domitian's time, was apparently worth a considerable sum. Thirty-nine *plethra* or *jugera* of cultivated ground near Bethlehem also seem more valuable than a similar plot of ground in Egypt (*Economic Survey*, II, 146 f.). On the other hand, the land near Dura Europos of which we have knowledge seems to have been comparatively cheap (see the following price list). The Talmud contains references to land mortgages and to land sales<sup>11</sup> which might usefully be compared in a special monograph with some new Greek documents from Dura Europos.<sup>12</sup>

The management of an estate to produce food for the household was something of a social duty for the upper classes of the Empire irre-

<sup>9</sup> See Newman, chapter III *passim*.

<sup>10</sup> F. Heichelheim, *Wirtschaftliche Schwankungen der Zeit von Alexander bis Augustus* (1930), 89 f.; C. B. Welles, *Yale Class. Stud.*, V (1935), 118 f.; Perg. Minns 1-3 (see E. H. Minns, *I. H. St.*, XXXV [1915], 22 f.; Paul M. Meyer, *Jur. Papyri* nr. 36; H. S. Nyberg, *Monde Oriental*, XVII [1923], 182 f.).

<sup>11</sup> Newman, 46/7; Krauss, II, 381; A. Büchler, *Der galiläische Amhaarez des 2. Jahrh.* (1906), 32 f., 255 f. on *Bab. Kidd.* 49b; 50a; *Bab. Baba Mezia* 66b; 67a; b; 68a; 72a; *Bab. Baba Bathra* 40b and other passages; A. Büchler, *Jews' Coll. Publ.*, IV (1912), 35 f.; G. J. Webber, *Journ. Compar. Legislat.*, 3rd ser., XV (1933), 105 f.; I. Herzog, *Main Institutions of Jewish Law*, I (1936), 119 f., 137 f., 258 f., 339 f., 345 f., 361 f. A. Gulak, *Études de Papyrologie*, I (1932), 97 f. *M. Baba Mezia* IX 10 (second century A. D.) mentions the lease of a field in Palestine for seven years against payment of a rent of 700 denarii.

<sup>12</sup> Dura Pg. 2 I; III; IV; 3; 11. See also H. Ingholt, *Berytus*, II (1934), 75 f.



spective of financial considerations. Agriculture was not considered as profitable as other professions.<sup>13</sup>

*Bab. Jebam.* 63a: "R. Eleazar (second century A. D., Palestine) further states: 'Any man who owns no land is not a proper man. . . . There will be a time when all craftsmen will take up agriculture. . . . No occupation is inferior to that of agricultural labour. . . .' R. Eleazar once saw a plot of land that was ploughed across its width. 'Wert thou to be ploughed along thy length also,' he remarked, 'engaging in business would still be more profitable.' Rab (third century, Palestine and Babylonia) once entered among growing ears of corn. Seeing that they were swaying, he called out to them 'Swing as you will, engaging in business brings more profit than you can do.' Raba (early fourth century, Babylonia) said: 'A hundred denarii in business means meat and wine every day; a hundred denarii in land, only salt and vegetables.' . . . R. Papa (fourth century, Babylonia) said: 'Sow, but do not buy, even if the cost is the same. There is a blessing in the former. Sell out to avoid disgrace. . . . Be quick in buying land.'"

After the death of the husband a widow had her dowry restored in land according to Jewish law.<sup>14</sup> It was also preferable that loans should be repaid in land,<sup>15</sup> and the Roman law of this period favors this tendency.<sup>16</sup>

#### *Prices of Land*

- 195 B. C. Dura Pg. 1, Europos. Estate (arable land, vineyards, gardens, house): 120 Seleucid silver drachmae.
- 24/3 (or 23/22) B. C. Perg. Minns 1 (Greek), Avroman (Kurdistan). The vineyard Datbakan: 30 (or 40) drachmae (followed by regular annual payments of 1 dr. and a fixed amount in kind).
- 43/4 (or 44/45) A. D. Perg. Minns 2 (Greek), Avroman (Kurdistan). The vineyard Datbakan: 55 drachmae (followed by regular annual payments of 1 dr. and a fixed amount in kind).
- 52/3 (or 53/54) A. D. Perg. Minns 3 (Pahlavi), Avroman (Kurdistan). The vineyard Datbakan: 54 drachmae.

<sup>13</sup> These are characteristic remarks of a third century authority in *Bab. Baba Mezia* 42a: "R. Isaac (third century A. D., Palestine and Babylonia) said: One should always divide his wealth into three parts: (investing) a third in land, a third in merchandise, and (keeping) a third ready at hand."

<sup>14</sup> *Bab. Ketub.* 67a.

<sup>15</sup> *Bab. Gitt.* 37a.

<sup>16</sup> E. I. Jonkers, *Economische en sociale toestanden in het Romeinsche rijk blijkende uit het Corpus iuris*," phil. diss. Utrecht (1933), 41 f., 51 f.

Domitian		Philostr., <i>Apoll.</i> , VI, 39, Antioch on the Orontes. Excellent olive garden: 15,000–20,000 drachmae.
Domitian		Euseb., <i>H. E.</i> , III, 20, region near Bethlehem. 39 plethra or jugera of cultivated land: 9,000 den. (see § III).
180	A. D.	Dura Pg. 23, Nabagata near Dura. Half of a vineyard and (!) of a slave: 500 Tyrian drachmae and the future revenue of the property. <sup>17</sup>
c. 180	A. D.	Dura Pg. 2, Tetyros near Dura. Several estates, value of one: less than 2,000 drachmae (l. 8); of another: more than 700 drachmae (l. 41).

<sup>17</sup> Dura Pg. 23:

## Dura Europos.

"In the second consulate of Bruttius Praesens and of Julius Verus, in the twentieth year of the reign of the Emperor Caesar Marcus Aurelius Antoninus and in the fourth of the Emperor Caesar Lucius Aurelius Commodus, his son, the Augusti, and in the year 491 according to the former calendar, on the fourth of the month Peritios (January 180 A. D.) in Europos on the boundaries of Arabia, when Lysanias son of Zenodotus son of Heliodorus was priest of Zeus; Theodorus son of Athenodotus son of Artemidorus, priest of Apollo; Heliodorus son of Diocles son of Heli-dorus, of the "ancestors"; Danymus son of Seleucus son of Danymus, of Seleucus Nicator: Lysias son of Lysias son of Heliodorus son of Aristonicus, a citizen of Europos who has his domicile in the village of Nabagata of the hyparchy around Gabalein, sold his slave named Achabous aged 20 years, and sold at the same time the half share of a vineyard belonging to him which is situated in the ephiphyteutic lands around the same village of Nabagata—the vineyard's local name is "lands of Baeiris" and Lysias has it in common possession with his brother Heliodorus son of Lysias, who possesses the other half of the vineyard. The above mentioned slave and the half share of the vineyard came along with some other property into the possession of the above mentioned Lysias as a result of his division of property with Heliodorus his brother, according to a contract drawn up in the local *chreophylakion*, in the last month of the present year. The above mentioned Heliodorus son of Lysias bought the sold half share of the vineyard together with the appertaining share of the orchards, the wine press and the other belongings, according to the boundaries and divisions of the vineyard, for 500 drachmae of Tyrian money and for all future revenue (from the vineyard). Lysias, the seller, was legal surety and agent and stipulated that in the event of anyone's trying to secure the sold slave and the half share of the vineyard, he would take legal action for their restoration to Heliodorus; if, however, he had no success and Heliodorus therefore suffered damage, he himself would pay for all damage two-fold and also pay a fine of 500 silver drachmae; even under such circumstances this document was to be valid. (second hand) Witnesses: Heliodorus, *strategus* and *epistates* of the town, Theom-nestus, Theodotus, Athenodorus *chreophylakes*, Olympus son of Lysias, Artemidorus son of Theodorus, Apollophanes son of Charanides. A copy has been made. 491, Perytios 4. (third hand) I, the above named Lysias, have made my sale in ac-cordance with the above written document and have brought it forward for registra-tion. (fourth hand) Peritios 4."

second cent. A. D.	Dura Pg. 4, Dura.	Arable ground: 1,000 drachmae.
227 A. D.	Dura Pap. 101, land planted with fruit trees on the Chabur canal near Dura:	175 denarii.

### v. *Livestock*

Cattle breeding in the Roman Near East and in the neighbouring Babylonian regions was managed with the scientific skill characteristic of the Hellenistic-Roman Age.<sup>1</sup> Well known centres were Antioch on the Orontes with its rich pasture lands in the woods;<sup>2</sup> Mata Mehasya<sup>3</sup> and Mehuza<sup>4</sup> in Babylonia; Apamea famous for its horses and cows;<sup>5</sup> Palmyra with its studs (which have probably been rediscovered by D. Schlumberger),<sup>6</sup> and Arabia with its studs;<sup>7</sup> Basan and Ekbatana in the Hauran<sup>8</sup> as well as Mesene in South Babylonia<sup>9</sup> with their famous beef production; the district of Gaugamela with its camels;<sup>10</sup> Pumbadita with its white asses and sheep;<sup>11</sup> Dura Europos,<sup>12</sup> Antioch on the Orontes<sup>13</sup> and Laodicea<sup>14</sup> with their sheep and goats; Petra with its camels, oxen and sheep;<sup>15</sup> Commagene<sup>16</sup> with a special breed of geese and its *porphyrones* (= purple gallinules). Syria was distinguished for special breeds of oxen and sheep,<sup>17</sup> Arabia for camels and sheep,<sup>18</sup> Mesopotamia for peacocks<sup>19</sup> and Palestine for a special "Herodian" breed of doves.<sup>20</sup> The bats of Borsippa,<sup>21</sup> the so-called "wild" silkworm of Assyria<sup>22</sup> and various cicadas<sup>23</sup> were also specialities of Syria.

<sup>1</sup> Krauss, I, 108 f.; II, 111 f.; Newman, 112 f. *passim*.

<sup>2</sup> Liban., *Ant.* = *Or.* 11, chapters 23; 26.

<sup>3</sup> *Bab. Baba Quamma* 119b.

<sup>7</sup> *Pal. Shabb.* 5, 7b 70.

<sup>4</sup> *Bab. Baba Bathra* 36a.

<sup>8</sup> Joseph., *Vita*, 11, 58.

<sup>5</sup> Strabo, XVI, C 752 § 10; 753 § 11.

<sup>9</sup> *R.-E.*, Art. Mesene, 1095.

<sup>6</sup> *Arch. Anz.*, L (1935), 559 f.

<sup>10</sup> Strabo, XVI, C 737 § 3.

<sup>11</sup> *Bab. Shabb.* 110a; *Bab. Bekorot* 3b; *Bab. Baba Quamma* 23b.

<sup>12</sup> *Dura Rep.*, IV, 96 f. nr. 221, 227, 240 = *S. E. G.*, VII, 419, 417, 385; C. B. Welles, "Dura Papyrus 101" (forthcoming in the *Rev. d'Hist. du Droit Orient.*, 1938, note 27); *S. E. G.*, VII, 350.

<sup>15</sup> Strabo, XVI, C 779 §§ 21, 25, 26.

<sup>13</sup> Liban., *Ant.* = *Or.* 11, chapter 26.

<sup>16</sup> Plin., *N. H.*, X, 55, 129.

<sup>14</sup> Plin., *N. H.*, VIII, 190.

<sup>17</sup> Plin., *N. H.*, VIII, 179, 198.

<sup>18</sup> Plin., *N. H.*, VIII, 67, 72; *Bab. Kethub.* 67a; *Bab. Baba Quamma* 55a; *Bab. Beza.* 20a.

<sup>19</sup> Diod., II, 53, 1; Petron., 55.

<sup>20</sup> *R.-E.*, Art. Herodes (Suppl. II, 147); Joseph., *Bell.*, V, 4, 4, 181; *M. Shabb.* XXIV 3; *M. Chull.* XII 1.

<sup>21</sup> Strabo, XVI, C 739 § 7.

<sup>22</sup> Plin., *N. H.*, XI, 75.

<sup>23</sup> Plin., *N. H.*, XI, 92.

Some breeds were introduced from abroad: Persian camels, asses and mules are found in Babylonia,<sup>24</sup> Egyptian oxen in Palestine,<sup>25</sup> and asses from Lycaonia in Palestine, Babylonia and Iran.<sup>26</sup> The horses of the Roman cavalry were bought or requisitioned without recourse to particular studs. Cattle breeding figures largely in our sources.<sup>27</sup> Horses, donkeys, mules and camels were the most important pack animals;<sup>28</sup> horses were also indispensable for the cavalry and for racing; oxen and cows were most useful for agriculture. Besides cattle were bred not only for beef, which was highly prized, but also for the arena.<sup>29</sup> The zebu was believed by the ancients to be bred only in Syria.<sup>30</sup> Pigs were in great demand except among the Jews.<sup>31</sup> Sheep and goats, especially the so-called fat-tailed sheep, were very common in the folds of the poorer population as well as on the large estates.<sup>32</sup> The Talmud prohibits the pasturing of sheep and goats outside the uncultivated woodlands, for very good reasons.<sup>33</sup> Poultry (fowl, geese, ducks, doves, pheasants, peacocks, quails, ravens, sparrows) was eaten by rich and poor alike.<sup>34</sup> The bee-keeping of Palestine was famous, and that of Babylonia was also of high repute.<sup>35</sup>

The breeding of sheep and goats was highly profitable. A Palestinian Talmudic authority of the third century A. D. says in *Bab. Chull.* 84a: "If one is desirous of becoming wealthy he should devote himself to the rearing of small cattle." Cattle raising was considered

<sup>24</sup> *Bab. Baba Quamma* 55a; *Bab. Baba Mezia* 97a; *Bab. Shabb.* 51b.

<sup>25</sup> *Bab. Sukka* 21b.

<sup>26</sup> Krauss, II, 117; Newman, 126.

<sup>27</sup> See Dalman, I, 169 f., 266 f., 236 f., 420 f., 568 f.; Gallinger, *Bibl. Reallex.*, Art. Viehwirtschaft, Stall; *R.-E.*, Art. Syria, 1563.

<sup>28</sup> Krauss, II, 115, 117 f., 118 f., 119 f.; Newman, 124 f., 126 f., 128 f.; Gallinger, *Bibl. Reallex.*, Art. Pferd, Viehwirtschaft, Stall; H. Ingholt, "Base with Military Camels," *Berytus*, III (1936), 116 f.; *R.-E.*, Art. Syria, 1563; Plin., *N. H.*, XXVIII, 200; Cagnat, nr. 1056 III a l. 30.

<sup>29</sup> Gallinger, *loc. cit.*; Krauss, II, 111 f.; Newman, 122 f.; *M. Baba Quamma* I 4.

<sup>30</sup> Plin., *N. H.*, VIII, 179.

<sup>31</sup> Matth., VII, 6; VIII, 32; Mark, V, 11 f.; Luke, VIII, 32 f.; XV, 15 f.; Krauss, II, 112.

<sup>32</sup> Matth., IX, 36; X, 6, 16; XII, 9, 11; XVIII, 12 f.; XXV, 32 f.; Luke, II, 8; XV, 4 f.; John, X, 11 f.; Plin., *N. H.*, VIII, 198; *R.-E.*, Art. Syria, 1563; Gallinger, *loc. cit.*; Newman, 115 f., 121 f.; Krauss, II, 112 f. *passim*.

<sup>33</sup> A. Büchler, *Der gal. Amhaarez*, 141 f., 173; Krauss, II, 141 f.

<sup>34</sup> Newman, 131 f.; Krauss, I, 110; II, 112, 137 f.; *R.-E.*, Art. Syria, 1563.

<sup>35</sup> Joseph., *Bell.*, IV, 8, 3, 469; M. Mainzer, *Monatsschr. Gesch. Wiss. Jud.*, LIII (1909), 539 f.; Newman, 135 f.; Krauss, II, 136/7, 506 note 798, 523/4 notes 963-966.

the backbone of agriculture in the Talmud.<sup>36</sup> Woodland pastures were common in the Lebanon region and elsewhere; the proprietor, usually the government, received payments for their use.<sup>37</sup>

There was fishing everywhere in the rivers, the lakes and the sea;<sup>38</sup> and we are told of artificial ponds, where fish were prepared for the market.<sup>39</sup> The Jordan was very popular for its fish,<sup>40</sup> and those of Lake Genezareth were very widely known.<sup>41</sup> Taricheae, a village situated on this lake, derived its name from the dried fish which were sold throughout the whole of Palestine.<sup>42</sup> The wealth of Sarepta, Caesarea, Neapolis, Lydda, and especially of Tyre and of other Phoenician cities was drawn in the main from the purple snail which they caught and utilized.<sup>43</sup> The *raivai* from Seleuceia in Pieria,<sup>44</sup> as well as the eels from the Orontes and from the lake of Apamea,<sup>45</sup> were exported as delicacies.

Some prices for cattle, especially from Palestine and Mesopotamia, have come down to us. For the most part, prices seem to have been higher in Palestine than in Egypt, while those of Mesopotamia were very often lower. Even at the beginning of the inflation of the Roman denarius in the first decades of the third century A. D. the comparatively costly Roman cavalry horses (mostly stallions) were valued in Dura Europos at only c. 55-400 denarii. On the other hand, nearly 700 denarii were asked for a cavalry stallion in Egypt during the first century A. D., and c. 18-100 denarii for common mares during the whole period of the Principate. In Babylonia full-grown asses could be bought for 8 denarii; in Egypt for c. 14-90 denarii; in Palestine for

<sup>36</sup> *Bab. Chag.* 13b; *Bab. Baba Mezia* 86b; *Bab. Shabb.* 118b.

<sup>37</sup> *Dar.-Saglio*, IV, 1340 f.

<sup>38</sup> Mainzer, *Monatsschr.*, LIII (1909), 463 f.; Newman, 136 f.

<sup>39</sup> For Palestine see *Bab. M. Kat.* 4a; *Bab. Baba Quamma* 81b; *Bab. Erub.* 47b; 48a; *M. Beza.* III 1; *Pal. Shabb.* XIII 14a; *Pal. Sanh.* VII 25b; X 29c; *Bab. Shabb.* 106b; E. W. G. Masterman, *Pal. Expl. Quart.*, LIII (1921), 91 f.

For Babylonia see Newman, 136 f. on *Bab. Ketub.* 79a; *Bab. Kidd.* 72a, etc.

<sup>40</sup> *Bab. Jebam.* 121a; *Pal. Jebam.* XVI 15d.

<sup>41</sup> Joseph., *Bell.*, III, 10, 8, 52; Matth., IV, 17-22; XIII, 47 f.; XVII, 27; Luke, V, 1 f.; 4 f.; John, XXI, 3 f.; Mark, I, 16 f.; Joseph., *Bell.*, IV, 8, 2, 457; *Bab. Baba Quamma* 81a.

<sup>42</sup> *R.-E.*, s. v.; I. G. Duncan, *Pal. Expl. Quart.*, LVIII (1926), 72.

<sup>43</sup> *Dar.-Saglio*, Art. purpura; *Tot. Orb. Terr. Descr.* in Müller, *Geogr. Graeco. Min.*, II, p. 519 § 31.

<sup>44</sup> Athen., VII, 326a.

<sup>45</sup> Aelian., XII, 29; *R.-E.*, Art. Syria, 1564.

ca. 100-200 denarii. The value of cows varies in the sources from 8 to 30 denarii in Babylonia, from 15 to 100 denarii in Egypt and from 100 to 200 denarii in Palestine. Sheep in Egypt were priced at more than 4 denarii; but in Palestine lambs under twelve months old at c. 2-4 denarii and rams at c. 4-40 denarii.

#### *Prices of Horses*

A. D. 208	Dura Pap. 8, Dura. <i>Assignatio</i> of a cavalry horse, 4 years old: 400 denarii.
245	Dura Pap. 3 Vers., Dura. Cavalry horse: 125 denarii.
c. 250	Dura Pap. 3 (ined.). Cavalry horses: 55-135 denarii.

#### *Prices of Asses*

A. D. I/II cent.	M. <i>Baba Quamma</i> X 4, Palestine. Two donkeys: 100 and 200 denarii.
150/c. 210	Bab. <i>Bekhoroth</i> 10b; 11a, Palestine. A newly born donkey foal: 2-4 denarii.
III cent.	Pal. <i>Baba Mezia</i> IV 1, 9d; Pal. <i>Kiddush</i> . 6, 61a, Babylonia. Donkey: 8 denarii.

#### *Prices of Cattle*

A. D. I/II cent.	M. <i>Menach</i> . XIII 8, Palestine. Ox: 100 denarii.
I/II cent.	M. <i>Baba Bathra</i> V 1, Palestine. 2 cattle: 200 denarii each.
I/II cent.	M. <i>Chull</i> . V 4; Bab. <i>Chull</i> . 83a, Palestine. Ox: 1,000 denarii.
III cent.	Bab. <i>Erub</i> . 85b, Babylonia. Ox: 1,000 denarii.
t. a. 130/160	M. <i>Baba Quamma</i> III 9, Palestine. Ox: 200 denarii.
c. 135/210	M. <i>Baba Quamma</i> III 9, Palestine. 2 oxen: one 20, the other 100 denarii.
III cent.	Pal. <i>Baba Mezia</i> IV 1, 9d; Pal. <i>Kiddush</i> . I 6, 61a, Babylonia. Cow: 8 denarii.
II/III cent.	Pal. <i>Kiddush</i> . I 6, Palestine. Cow: 100-200 denarii.
250/300	Bab. <i>Baba Mezia</i> 69b, Babylonia. Cow: 30 denarii.
I/II cent.	M. <i>Menach</i> . XIII 8, Palestine. Calf: 20 denarii.

#### *Prices of Sheep*

B. C. 65	Joseph., <i>Ant.</i> , XIV, 2, 2, 26, Jerusalem. Lamb: 1,000 (Tyrian?) drachmae.
A. D. I/II cent.	M. <i>Kereth</i> . V 2, Palestine. Ram: 8 denarii.
I/II cent.	M. <i>Menach</i> . XIII 8, Palestine. Ram: 8 denarii.

I/II cent.	M. <i>Kereth</i> . VI 6, Palestine. Rams: Prices of 4-8, 8 and 40 denarii.
I/II cent.	M. <i>Menach</i> . XIII 8, Palestine. Lamb: 4 denarii.
I/II cent.	M. <i>Shek</i> . II 4, Palestine. Lamb: 4-12 denarii.
159/c. 210	<i>Bab. Bekh</i> . 10b; 11a, Palestine. Lamb: 2-4 denarii.
I cent.	M. <i>Hagiga</i> I 2, Palestine. Newly born lamb: c. 1/6 denarius.
late III cent.	<i>Bab. Bekh</i> . 11a, Babylonia. Newly born lamb: c. 1/6 denarius.

#### Other Livestock Prices

A. D. 50/90	M. <i>Kerethoth</i> I 7, Jerusalem. Two pigeons: 1 aureus and later 1 denarius.
early I cent.	Matth., X, 29, Palestine. Two sparrows: 1 as.
early I cent.	Luke, XII, 6, Palestine. Five sparrows: 2 asses.
II/III cent.	<i>Bab. Chullin</i> 49a, Babylonia. A goose: 1 denarius.

#### vi. Mineral Resources

Unfortunately the mines of the Roman Near East have not been sufficiently explored, although research into ancient conditions might be of direct use in opening up areas for modern works. The most important products (nearly a monopoly of the region) were asphalt and petroleum, of which the larger part was found outside the Roman boundaries.<sup>1</sup> Excellent sand for glass production was found near Sidon.<sup>2</sup> Well known also were the *auripigmentum*<sup>3</sup> and the cinnabar from Syria;<sup>4</sup> the Nabataean gold and silver;<sup>5</sup> the amber,<sup>6</sup> gypsum<sup>7</sup> and alabaster from Syria;<sup>8</sup> the amethyst from Petra<sup>9</sup> and various other precious stones from Syria and Assyria.<sup>10</sup>

<sup>1</sup> See for Samosate: Plin., *N. H.*, II, 235; XXXVI, 181, for Sidon: Vitruv., VIII, 38; Plin., *N. H.*, XXXV, 178, for the Dead Sea: Strabo, XVI, C 763 §§ 42, 45; Plin., *N. H.*, II, 235; VI, 129 f., 152; XXX, 82; XXXV, 178 f.; for Babylonia: Herodot., I, 179; Diod., II, 12; Just., I, 2, 7; Cass. Dio, LXVIII, 27; *Ibid.* Char., I; Zosim., III, 16; Strabo, XVI, C 738 § 4; 739 § 6; 743 § 15; 747 § 24; Amm. Marc., XXIII, 6, 16, 23; Plut., *Alex.*, 35; Dioscor., I, 101; Plin., *loc. cit.* See also R. J. Forbes, *Bitumen and Petroleum in Antiquity* (1936), 16 f., 18 f., 19 f.

<sup>2</sup> Strabo, XVI, C 757 § 24/5; Plin., *N. H.*, XXXVI, 190 f.

<sup>3</sup> Plin., *N. H.*, XXXIII, 79.

<sup>4</sup> *Ibid.*, 120; XXXV, 40; *R.-E.*, Art. Minium.

<sup>5</sup> Strabo, XVI, C 784 § 26.

<sup>6</sup> Plin., *N. H.*, XXXVII, 37.

<sup>6</sup> *Ibid.*, XXXVI, 61; XXXVII, 143.

<sup>7</sup> *Ibid.*, XXXVI, 182.

<sup>7</sup> *Ibid.*, XXXVII, 121.

<sup>10</sup> *Ibid.*, XXXVII, 149, 150, 159-161, 186.

Copper was mined in Kurdistan, on the Lebanon range, elsewhere in Syria and in Southern Palestine;<sup>11</sup> iron, near Jericho, the sources of the Jordan, Beyrouth, and especially near Germanicia in the north of Syria.<sup>12</sup> A sufficient but not abundant supply of salt was found in this region.<sup>13</sup> Quarries are known to have existed near Antioch on the Orontes;<sup>14</sup> and there were alabaster quarries<sup>15</sup> near Damascus and in other districts of Syria,<sup>16</sup> as well as chalk quarries near Baalbek, Antioch, Tamak, Heban, Enesh near the Euphrates and in other places in north Syria. White marble from Sidon and Tyre was used even outside the boundaries of the Roman Near East. Some quarries of Palestine are well known;<sup>17</sup> the Talmud occasionally mentions quarries,<sup>18</sup> sulphur-mines, alum-mines and jewel-mines. Most of these possessions in the Roman Near East were controlled and directed by the government. We cannot deduce this directly from Eastern sources but from our knowledge of other provinces of the Roman Empire.<sup>19</sup>

<sup>11</sup> *R.-E.*, Art. Bergbau (Suppl. IV), Kupfer, Syria, 1565; Blümner, *Technologie*, IV, 58/9; Euseb., *H. Eccl.*, VIII, 13, 5; *Mart. Palest.*, XIII, 1; B. Violet, "Die palästinischen Märtyrer des Eusebius von Caesarea," in Gebhardt-Harnack, *Texte und Untersuchungen*, XIV (1894), 56, 58, 62, 66, 105/6; M. Avi-Yonah, *Quart. Depart. Ant. Pal.*, V (1936), 146 (Hyrkania), 178 (Wadi Meneiyye, Tell Khara Hadid, Byer).

<sup>12</sup> Blümner, *op. cit.*, 70; Cumont, *Etudes Syr.*, 151 f.; *R.-E.*, *loc. cit.*

<sup>13</sup> *R.-E.*, Art. Babylonia, 2714, Salz; *Dar.-Saglio*, Art. Sal; Rostovtzeff, *Geschichte der Staatspacht*, 411 f.; *Bab. Kethub.* 79b.

<sup>14</sup> Liban., *Or.* 11, chapt. 25; Statius, *Silv.*, I, 5, 39; *R.-E.*, Art. Steinbruch; Syria, 1559, 1565; I. Loew, *Gaster Anniv. Volume* (1936), 374 f.

<sup>15</sup> *R.-E.*, *loc. cit.*; Loew, *loc. cit.*; Th. Wiegand, *Baalbek*, I (1921), 34 f.

<sup>16</sup> M. Avi-Yonah, *Quart. Dep. Antiq. Pal.*, V, 146 (territory of Ptolemais), 151 (Caesarea), 154 (Lydda), 168 (Scythopolis).

<sup>17</sup> *M. Sebiith* III 5, 6; *Pal. Sebiith* 3, 5, 34c 72.

<sup>18</sup> *Pal. Shekal.* 5, 49a 48; *Bab. Kethub.* 79b.

<sup>19</sup> *R.-E.*, Art. Bergbau (Suppl. IV), Metalla, Steinbruch.



## CHAPTER II

### THE PEOPLE

#### i. *Population and Census*

Beloch estimates the population of Palestine and Syria during the time of the Principate at from five to six millions, two million of which might have been in Palestine.<sup>1</sup> In addition we have some special figures. In 6/7 A. D. Apamea with its peasant districts had no less than 117,000 men and women of full citizen status.<sup>2</sup>

Dessau, *I. L. S.*, 2683:

Venice.

"Quintus Aemilius Secundus, son of Quintus, of the Palatine tribe. . . . I have held the *census* of the 117,000 citizens of the town of Apamea under the command of Quirinius."

Together with slaves, freedmen and non-citizens the population may have reached 4-500,000. The size of Antioch was as great as that of Alexandria:<sup>3</sup> the city had 10,000 *kleroi* of full citizens in the fourth century A. D., c. 150,000 inhabitants at the time of Libanius and c. 200,000 at the time of St. John Chrysostom.<sup>4</sup> The population must have been much larger in the first and second century A. D., perhaps twice or three times its later size. In the fifth century the *dioecesis* of Cyrrhus, a territory of c. 1,600 square miles, had c. 200,000 members of the Orthodox Christian community, i. e. 125 inhabitants to the square mile, and many more, if the heretics are included.<sup>5</sup> Assuming that the average population of Syria, Palestine and Transjordan to the square mile was equal and reckoning the whole territory to be 80,000 square miles in extent, an estimate of ten million inhabitants—though twice that of Beloch—is in the present writer's opinion by no means improbable. In 68 A. D. Galilee had 400,000 inhabitants or nearly that number.<sup>6</sup> Jerusalem before the destruction of the temple

<sup>1</sup> J. Beloch, *Die Bevölkerung der griech.-röm. Welt* (1886), 242 f.

<sup>2</sup> See Rostovtzeff, *Rev. Hist.*, CLXXV (1935), 17 and note 1; F. Cumont, "The Population of Syria," *Journ. Rom. Stud.*, XXIV (1934), 187 f.

<sup>3</sup> Beloch, *op. cit.*, 484.

<sup>4</sup> Julian., *Misop.*, 362 c; 370 d; Libanius, *Ep.* 11, 19 = W. 11, 37; John Chrys., *Homil. in Ignat.*, 4 (*Patr. Gr.*, L, p. 591); *Homil.* 85 (86) (*Patr. Gr.*, LVIII, p. 762).

<sup>5</sup> Cumont, *op. cit.*, 189.

<sup>6</sup> Beloch, *op. cit.*, 246/7.

is estimated by conservative modern scholars to have possessed a population of up to 100,000 and more.<sup>7</sup>

According to Josephus (*Bell.*, II, 14, 3, 280; VI, 9, 3, 423/427) it included in the time of the Pascha pilgrimage c. three millions, certainly exaggerated but quite instructive information. In Parthian and Sassanian time Babylonia must have had a dense population of scarcely less than six to eight millions.<sup>8</sup> In the middle of the first century A. D. Seleucia on the Tigris had c. 600,000 inhabitants including 50,000 Jews, and in the time of Marcus Aurelius before the Romans destroyed the town c. 3-400,000 inhabitants.<sup>9</sup>

The population of Transjordan, the Hauran and Palmyra increased steadily during the Principate until the third century A. D. as a result of the organized settlement policy of Rome.<sup>10</sup> On the other hand, the population of Palestine decreased greatly owing to the Jewish revolutions.<sup>11</sup> We may assume that the population of Syria, where many new irrigation systems were instituted (see chapter I § II), was in any case not diminished. Similarly Babylonia was provided with numerous new canals, especially with the system of the famous "King's river."<sup>12</sup> The number of Roman immigrants and colonists in the East certainly increased during the first and second centuries A. D.; on the other hand, the Greco-Macedonian race of the Seleucid Age diminished very considerably through numerous wars and through marriage with natives. Many Syrians, especially Jews, were compelled to emigrate into other provinces of the Roman Empire as well as into the Parthian and Sassanian regions, so that at the end of our period the population of Syria may have diminished to a small extent. It consisted mainly of Aramaic Syrians, some Jews, and of a slowly growing number of

<sup>7</sup> *R.-E.*, Art. Jerusalem, 951; Beloch, *op. cit.*, 247/8; S. W. Baron, *Social and Religious History of the Jews* (1937), I, 131; III, 33 f., 39.

<sup>8</sup> Beloch, *op. cit.*, 250 f.

<sup>9</sup> *R.-E.*, Art. Seleukeia; Plin., *N. H.*, VI, 122; Fest. Ruf., 21; Eutrop., VIII, 10; Oros., VII, 15, 3; Isidor., *Chron.*, III, 459, 276 a; Hieron. on Euseb. *Chron.* (ed. Schoene), II, 171.

<sup>10</sup> A. H. M. Jones, *The Cities of the Eastern Roman Provinces* (1937), 267 f., 271 f., 278 f., 284 f., 291 f.; Dessau, II, 2, 629 f.

<sup>11</sup> Jones, *op. cit.*, 278, 462; Krauss, II, 215; 382; A. Büchler, *Der gal. Amhaarez* (1906), 237 f., 241 f.; A. Büchler, *Jews' Coll. Publ.*, I (1909), 43 f.; A. Büchler, *The Economic Conditions of Judaea after the Destruction of the Second Temple*, *Jews' Coll. Publ.*, IV (1912), *passim*.

<sup>12</sup> *R.-E.*, Art. Babylonia, Mesopotamien.

Arabic immigrants. But there were not a few communities of *poleis* and villages from the Mediterranean Sea to Iran which boasted rightly or wrongly of Greek or Macedonian origin.<sup>13</sup>

The problem of the Roman census in Syria and Palestine is very difficult, especially outside the ordinary provincial districts. The early provincial organization of Pompey and Gabinius<sup>14</sup> needed from time to time a census, and the proconsul Sulpicius Quirinius<sup>15</sup> under Augustus drew up in Syria and in the new province of Palestine a key census which is mentioned by many of our authorities. Besides, in 1 B. C. (according to Luke, II, 1-5, an extremely difficult passage) there was a census in the Palestine of the sons of Herod the Great ordered by Augustus: every one had to be enrolled in the "*ἰδία πόλις*" to which he belonged. In the present writer's opinion that passage must be translated and interpreted in a manner that entails no historical impossibility. The Gospel of St. Luke was probably written in the first century A. D., a generation or so after the life of Christ.<sup>16</sup> A misstatement about the date of the birth of Christ, which is suggested by many distinguished scholars, could have been refuted not only by both the non-Christians and the Christians living near Bethlehem but also by the family of Christ. According to Eusebius (*Hist. Eccl.*, III, 20; see chapt. I § III) His family most probably had a small holding near Bethlehem up to the reign of Domitian. Sulpicius Quirinius was *legatus* in Syria and Palestine about 6/7 A. D. but certainly not previously in 1 A. D.<sup>17</sup> Therefore I do not think it possible to translate

<sup>13</sup> A. H. M. Jones, *op. cit.*, *passim*; Joseph., *Bell.*, V, 11, 3, 460; 463; 465; M. Rostovtzeff, *Yale Class. Stud.*, V (1935), 195 f.

<sup>14</sup> A. H. M. Jones, 258 f., 454 f. and App., *Syr.*, VIII, 50.

<sup>15</sup> Dessau, *I. L. S.*, 2683; Malalas, IX, 226; *Hist. Apost.*, V, 37; Joseph., *Ant.*, XVII, 13, 21, 342 f.; XVIII, 2, 1, 26; XIX, 5, 2, 102; *Bell.*, II, 17, 8, 433; VII, 8, 1, 253; *R.-E.*, Art. Census, Sulpicius, nr. 90; Syria, 1029; *Cambridge Ancient History*, Index s. v. Sulpicius Quirinius; Keil-Premmerstein, *Dritte Reise in Lydien*, 68 f., nr. 85; W. Schürer, I (third ed.), 508 f.; M. Rostovtzeff, *Rev. Hist.*, CLXXV (1935), 17 and note 1; H. Dessau, *Geschichte der römischen Kaiserzeit*, II, 2 (1930), 612 note 4, 776/7; W. Lodder, *Die Schätzung des Quirinius bei Flavius Josephus* (1930); E. Groag, *Oesterreichische Jahreshefte*, XXI-II (1924), Beiblatt, 445 f.; H. Dessau, *Klio*, XVII (1920), 252 f.; F. Bleckmann, *Klio*, XVII (1921), 104 f.; W. M. Ramsay, in *Journ. Rom. Stud.*, VII (1917), 229 f.; R. Syme, *Klio*, XXXIII (1934), 133 f.; L. Ross Taylor, in *Am. Journ. Phil.*, LIV (1933), 120 f. and in *Journ. Rom. Stud.*, XXVI (1936), 161 f.; F. Cumont, in *Journ. Rom. Stud.*, XXIV (1934), 187 f.; Th. Corbishley, *Klio*, XXIX (1936), 81 f.; A. Hauck, *Realenc. für protest. Theol. und Kirche*, IX (1901), 37 f.

<sup>16</sup> *Die Religion in Geschichte und Gegenwart* (2nd ed.), Art. Evangelien, Lukas.

<sup>17</sup> *R.-E.*, Art. Sulpicius.

Luke, II, 2, as it is usually done: "This census was the first during Quirinius' prefectureship of Syria." All difficulties are resolved if we translate: "This census was the first before (= *πρώτη*) that under the prefectureship of Quirinius in Syria." That this is the original meaning of Luke II, 2 is proved by the fact that Tertullian must have understood the passage in the same manner as we suggest. He declares (*Adv. Marcionem*, 4, 19) that the census in question was held under Sentius Saturninus; but he certainly has not the intention of correcting a clear statement of the holiest and most trustworthy book he knows. He must have translated the passage in question in a manner which did not expressly make mention of a certain *legatus* of the census, and his version, which he can only have learned from his teachers, was in all likelihood the early conception of the text by the Christian community of the first century A. D.

In point of fact we know with certainty from Josephus (*Ant.*, XVIII, 1, 1, 1-10; XX, 5, 2, 102; *Bell.*, II, 8, 1, 118; 17, 8, 433; VII, 8, 1, 253) that there was no census of ordinary Jewish settlers before Quirinius; but it is generally forgotten that half or two-thirds of Herod's kingdom was his private domain,<sup>18</sup> and that a census must have been held in these regions to facilitate the collection of poll and land taxes which were directly owed to the king.<sup>19</sup>

Joseph., *Ant.*, XVIII, 1, 1, 1-10: "Now, Quirinius, a Roman senator, . . . came at this time into Syria, . . . being sent by Caesar (Augustus) to be a judge of the people of that province (*ἔθνος* in Greek) and to take a census of their possessions (*τιμητῆς τῶν οὐσιῶν*). . . . Moreover, Quirinius came into Judaea which was now added to the province of Syria, to take a census of the possessions. . . . But the Jews, although at the beginning they took the report of a census (*ἀπογραφὰι*) heinously, . . . gave an account of their estates. Yet . . . one Judas from Galilee . . . , who taking with him Saddouk, a Pharisee, became zealous to draw them to a revolt who both said that the census (*ἀπορίμῃσις*) was no better than an introduction to serfdom."

The well-known will of Herod the Great, which must have been drafted a few years before the birth of Christ, took a very close survey of all

<sup>18</sup> *R.-H.*, Art. Herodes (Suppl. II, 69, 89).

<sup>19</sup> For the *φάρσαι* or *πρόσοδοι* from the crown lands of the Jewish kings and for their *εὐσφοραὶ* see Joseph., *Bell.*, I, 18, 5, 362; 24, 5, 483; II, 1, 2, 4; 6, 3, 97; *Ant.*, XIV, 10, 6, 206; XV, 4, 2, 96; 4, 4, 106; 10, 1, 344 f.; 10, 4, 365; XVI, 2, 5, 64; XVII, 1, 2, 25-28; 8, 4, 204; 11, 4, 320; Strabo, XVI, C 763 § 41; *R.-H.*, Art. Herodes (Suppl. II, 44).

the resources of the kingdom, and this could not have been possible without a recent census of the actual domain of the king.<sup>20</sup> A new census was needed as a matter of course about the time of the birth of Christ after Augustus had divided the kingdom of Herod the Great under his sons. We remember that according to Luke, II, 4, the whole village of Bethlehem belonged to the οἶκος Δαυίδ, in the writer's opinion, to the domain<sup>21</sup> of the old Jewish kings which Herod and his successors certainly inherited. Ἰδία πόλις in Luke, II, 3, which is usually related to the Hellenistic Egyptian term ἰδία (i. e. πατριά in the language of Luke), is more suitably connected with the official terminology of the Asiatic Empire of Alexander and of the Seleucids, the immediate predecessors of the Jewish kings. In this system ἰδιος denotes the possessions of the king reserved for certain special purposes.<sup>22</sup> Ἰδία (πόλις), in view of this, will therefore mean a region or a city reserved for the king's possession. Everyone in Palestine during the first century A. D. would have immediately understood the meaning of the terms οἶκος and ἰδιος.

Later in the third century A. D. (and possibly earlier) the normal Roman census, begun in the time of Quirinius, seems to have been held every four years. Malalas (XII, 298), in any case, mentions that Gallienus remitted the collection of taxes for Antioch over four years, and this might have been the normal period at this time between each census.<sup>23</sup>

<sup>20</sup> For Herod's testament see Joseph., *Ant.*, XVII, 6, 1, 146 f., 8, 1, 189 f.; 12, 1, 321 f.; 11, 4/5, 318 f.; *Bell.*, I, 32, 7, 646; II, 6, 3, 95 f.; Strabo, XVI, C 765 § 46; *R.-E.*, Art. Herodes (Suppl. II, 145, 169, 171, 192). The official description of the political status of the mother of Christ which Tertullian quotes (*Adv. Jud.*, 9: *sicut apud Romanos in censu descripta est Maria*) cannot be connected with such an Aramaic census list. The original document, if genuine at all, might, therefore, have belonged to the papers of the census archive of the Roman administration (in Antioch or Palestine?), as Tertullian actually tells us (see *loc. cit.* and *Adv. Marcionem*, 4, 7: *Romana archiva custodiunt*). It might have been handed in by Christ's family after Palestine had become a Roman province; i. e. for the census of Quirinius or for one census of the next decade, and before Christ was 14 years old and had to be notified to the authorities (see *Dig.*, L, 15, 3 in chapt. IV § II).

<sup>21</sup> For the meaning of οἶκος see *R.-E.*, Art. Herodes (Suppl. II, 70, 89, 199; Joseph., *Ant.*, XVII, 13, 5, 1355).

<sup>22</sup> For ἰδία in Egypt see V. Martin, "Recensement periodique et réintégration du domicile légal," *Atti del IV. Congresso Internazionale di Papirologia* (1936), 225 f.; for ἰδιος in the Asiatic traditions of Hellenism see B. A. van Groningen, *Aristote, Le second livre de l'économique* (1933), 37 f.; for the *communis opinio interpretatorum* referring to ἰδιος and οἶκος see Rostovtzeff, *Kolonat*, 305 f.

<sup>23</sup> For the *censitio* in Palestine see also S. H. A., *Pesc. Niger*, VII, 9 (translation in chapt. IV § II) and Tertullian, *De Carne Christi*, II.

## ii. *Houses and Miscellaneous Property*

The Talmud gives us much information about the construction of houses in Palestine and Babylonia and shows that they bear a very strong resemblance to the type of house usual throughout the Roman Empire. Further information has been provided by excavations in the whole Roman Near East. We find a great variety of buildings, ranging from the tents of the Beduin tribes, simple shacks made of twigs or reeds and houses of unburned tiles to the huge lodging houses with several storeys, the immense caravanseries and the expensive palaces and the famous temples.<sup>1</sup> Houses and graves could also be in the common possession of several persons.<sup>2</sup> We have figures of some of the rents, building costs and selling prices of houses in Palestine and Palmyra, which seem to be much higher than those in Egypt at the same time.

A. D. I/II cent.

M. *Baba Mezia* V 2, Palestine. Lease of a house for 40 denarii per year or 4 denarii per month (i. e. 48 denarii per year).

II cent. (after Hadrian) M. *Baba Mezia* V 8. Lease of a bath-house for 12 aurei per year.

II cent. M. *Baba Mezia* V 3, Palestine. Lease of a house for 10 aurei per year.

182 Berytus, III (1936), 109/110, Palmyra. Costs of building a bath-house: more than 2,500 denarii.

[Greek]: "Thomallakis, (daughter of) Haddûdan, (son of) Yarhibole, (son of) Haddûdan, (son of) Firmon, of the tribe of the Khonites, has distinguished herself in presenting 2,500 denarii toward the building of the bath of the gods Aglibol and Malakbel. Year 493. Loios (August 182 A. D.)."

<sup>1</sup> Krauss, I, chapter I *passim*; II, 381; Newman, 267; Rostovtzeff, *S. E. H. R. E.*, chapter V, note 4; VII, notes 20, 27, 30, 31, 32. See also chapt. III § III note 18.

<sup>2</sup> See M. *Baba Mezia* X 1 and for graves Berytus, III (1936), 109/10; *C. I. S.*, II, 1 nr. 213; II, 3, I nr. 4134, 4171, 4172, 4173, 4174, 4175, 4185, 4195, 4197, 4198, 4199, 4204, 4206; 4211, 4213, 4214, 4215, 4218; I. Herzog, *Main Institutions of Jewish Law*, I (1936), 213 f.; Berytus, II (1934), 76 f. Palmyra. (Aramaic): "The exedra, to your right when you enter, the whole of it, was bestowed and given in partnership by Malê, son of Hairan son of Sasan, to Taibhol, son of Abda son of Baibbol, his relative, for himself and for his sons and for the sons of his sons, in their honour forever. In the month of March, Year 503 (= 183 A. D.)."

early III cent.

*Pal. Kethuboth* IV 14, 29b, Palestine.  
Price of house: 10 aurei (—[gold]  
denarii).<sup>5</sup>

### iii. Slavery

The institution of slavery in the Roman Near East and in the neighbouring Babylonian region was similar to that in Egypt.<sup>1</sup> Occasionally slaves were used in agriculture<sup>2</sup> and very often some learned handicrafts,<sup>3</sup> but domestic service was their usual occupation.<sup>4</sup> It is still doubtful, however, whether slaves born in the household were privileged by law as in Egypt.<sup>5</sup> Very often women brought slaves with them in their marriage portion.<sup>6</sup> Freeing of slaves was not unusual, but in the case of Jewish masters was distinguished from the Roman practices by certain peculiarities.<sup>7</sup> Frequently liberated slaves became wealthy.<sup>8</sup>

Ninety-seven thousand Jews were sold into slavery during the first rebellion and a very great number under Hadrian.<sup>9</sup> We have not a

<sup>1</sup> A comparison with the other data mentioned above proves with certainty that *aurei* and not *denarii* are meant in this passage. See Krauss, II, 381. The price of a *πύργος* in Transjordanian amounted to 60 *solidi* in 485/6 A.D. (*S. E. G.*, VII, 1184). See also *S. E. G.*, VII, 1193 and § V note 10.

<sup>2</sup> Krauss, II, 83 f. *passim*; R. Salomon, *L'esclavage en droit comparé juif et romain* (1931), *passim*; I. Ziegler, chapter VI; A. Gulak, *Études de Papyrologie*, I (1932), 98 f.

<sup>3</sup> *Dura* Pg. 23 (slave, belonging to a vineyard near Dura; see chapt. I § IV note 17); *M. Baba Quamma* I 3 (slave and cattle); *M. Baba Mezia* VII 2, 6 (slave as reaper); *Bab. Shabb.* 25b; Krauss, II, 84; Ziegler, 231 f.

<sup>4</sup> *Pal. Kidd.* 2, 3, 62c 55 (tailor, cook, baker, policeman, etc.); *M. Baba Mezia* VIII 4 (dancer, music-girl); *Bab. Kethub.* 40a; *Bab. Baba Bathra* 13b; 89a; *Bab. Nidda* 6b (baker). See also chapt. III § I notes 94 and 95.

<sup>5</sup> Krauss, I, 127; II, 87 f., 493 note 596; Newman, 69 f.; *R.-E.*, Art. *Sklaverei* (Suppl. VI, 1002); A. Büchler, *Mon. Gesch. Wiss. Jud.*, LXXVIII (1934), 130 f.; *O. I. S.*, II, 3, I, nr. 4115 bis; *Bab. Nidda* 6d; Ziegler, 229 f.

<sup>6</sup> Bellinger-Welles, *Yale Class. Stud.*, V (1935), 103.

<sup>7</sup> *Dura Rep.*, VI, 423 f. on *Dura* Pg. 21; *M. Kethub.* V 5; *Bab. Kethub.* 80b; Krauss, II, 45, 83/4. See also § V.

<sup>8</sup> Krauss, II, 98 f.; Newman, Index s. v. slavery; I. Herzog, *Main Institutions of Jewish Law*, I (1936), Index s. v. slaves; R. Salomon, *loc. cit.*

<sup>9</sup> H. Ingholt, *Berytus*, II (1935), 92; I. Ziegler (1903), chapter VI, 214 f.; *C. I. S.*, II, 1 nr. 161; II, 3, I, nr. 3913, l. 90; 3996; 4174; Cagnat, III, 1086; 1103; *S. E. G.*, VII, 1037; *O. G. I. S.*, 606-620; Dessau, *I. L. S.*, 2683; Joseph., *Vita*, 11, 49; 51; *Juv.*, I, 104-106; M. P. Charlesworth, *Five Men* (1936), 8 f.; *R.-E.*, Art. *Thallus*; for Demetrius from Gadara see *Econ. Surv.*, I, 393.

<sup>10</sup> *R.-E.*, Art. *Sklaverei*, 995.

few documents about the slave trade and especially the export of slaves.<sup>10</sup>

*Bab. Gittin* 86a: "Rab Judah (third century A. D., Babylonia) laid down the following formula for the deed of sale of a slave: This slave is legally adjudicated to bondage and is absolved and dissociated from all freedom and claim and demands from the King and the Queen, and there is no mark of any (other) man upon him, and he is clear of all blemishes and from any boil that may come out within four (this figure is disputed by the authorities) years whether new nor old."

Some, for example, submitted to slavery in order to relieve their debts.<sup>11</sup> Import duties on slaves are proved to have existed on the frontiers of the Roman Empire, of the provinces and of the *polis* districts.<sup>12</sup> Large slave markets existed at Tyre, Akko, Gaza, Batne and—in the time of the Jewish rebellions—at Hebron.<sup>13</sup> In Baitokaike, and probably elsewhere, slaves were sold in public by the auctioneer.<sup>14</sup> We find some masters who could boast of great numbers of slaves.<sup>15</sup> Even in Byzantine times the large estates of Antiochian citizens would have 1–2,000 slaves, and one household could free as many as 8,000 slaves.<sup>16</sup> We have only a few indications of prices of slaves in the Talmud and in Greek parchments and papyri. They seem not to differ to any degree from the Egyptian evidence.

### *Prices of Slaves*

A. D. 166                      Meyer, *Jur. Pap.*, nr. 37, Seleuceia in Pieria. Male slave aged seven years: 200 denarii.<sup>17</sup>

<sup>10</sup> Meyer, *Jur. Pap.*, nr. 37; Krauss, II, 85 f.; Newman, 67 f.; *Bab. Aboda Zara* 13a; *Dura* Pg. 10; 21; 23; *B. G. U.*, I, 316. See also § V, chapt. I § IV note 17, chapt. III § II notes 61 and 62, chapt. IV §§ II and V.

<sup>11</sup> See *Dura* Pg. 10 (= *Dura Rep.*, II) and quite analogous *Bab. Baba Mezia* 60b; 71a, Talmudic passages whose relevance has remained hitherto unnoticed.

<sup>12</sup> *R.-E.*, Art. *Sklaverei*, 1020/21; Meyer, *Jur. Pap.*, nr. 37; Cagnat, 1056 = *O. G. I. S.*, 629 = *C. I. S.*, II, 3, I, 3913; *Bab. Baba Bathra* 127 f.

<sup>13</sup> *R.-E.*, Art. *Sklaverei*, 995; Krauss, II, 85.

<sup>14</sup> *O. G. I. S.*, 262, 20 f. See chapt. IV § I.

<sup>15</sup> *Bab. Kidd.* 60b; *Pal. Jebam.* 8, 1, 8d 17; 8, 3, 19d 15; *Bab. Joma* 35b; *Bab. Baba Mezia* 84b. See § VII, note 13.

<sup>16</sup> Joh. Chrys., *Hom. ad Matth.*, 63, 4; *Vita parvae Melaniae. Hist. Laus.*, 109 = *Patr. Gr.* XXXIV, 1230.

<sup>17</sup> *Pap. Brit. Mus.* 229 =

166 A. D.

Seleuceia in Pieria.

Paul M. Meyer, *Jurist. Papyri* (1920), nr. 37.

(Latin) "I, Gaius Fabullius Macer, an *optio* of the trireme Tigris in the praetorian fleet from Misenum, bought a slave of "Transfluminian" nationality named Abbas also called Eutyches or whatever his name may be, aged approximately seven



- I/II cent. M. *Baba Quamma* IV 5, Palestine. Prices of male and female slaves between 1 and 10,000 denarii.
- 180 Dura Pg. 23, Nabagata near Dura. Slave belonging to a vineyard: less than 500 Tyr. drachmae.
- late II cent. *Bab. Kidd.* 20a; *Bab. Arakh.* 30b, Palestine and Babylonia. Prices of Jewish slaves which had to be freed: 100-200 denarii.
- 243 Dura Pg. 20 (*Yale Class. Stud.*, V, 95 f.), Edessa. Female slave aged 28 years: 700 denarii.<sup>18</sup>
- 359 B. G. U., I, 316, Ascalon. Gaulish slave aged fourteen years: 18 solidi.

years, from Quintus Julius Priscus, a private soldier of the same fleet and of the same trireme, at the price of 200 denarii plus the export tax. Fabullius Macer made the condition that the said slave should fulfil the health requirements of the aedile's edict and that if anyone should prove that he or any part of him (did not do so) he would give to him the purchase price duly and without question or argument; and Quintus Julius Priscus bound himself to that agreement. Gaius Julius Antiochus, *manipularius* of the trireme Virtus, offered to accept the contract as made under his responsibility and authority.

Quintus Julius Priscus, the seller, has acknowledged that he has received and has in his possession the 200 denarii mentioned above, the full number and of standard value, from Gaius Fabullius Macer, the buyer, and that he has handed over to him the above mentioned slave Eutyches on fair terms. This transaction took place at Seleuceia in Pieria in the winter camp of the division of the praetorian fleet from Misenum, on the ninth day before the Kalends of June during the consulship of Quintus Servilius Pudens and Aulus Fufidius Pollio (24th May, 166 A. D.).

(Second hand) I, Quintus Julius Priscus, a private soldier of the trireme Tigris, have sold to Gaius Fabullius Macer, an *optio* of the same trireme, my slave Abbas also called Eutyches, and have received the price of 200 denarii, as was written above.

(Third hand) I, Gaius Julius Titianus, a *suboptio* of the trireme Liber Pater, wrote on request instead of Gaius Julius Antiochus, a *manipularius* of the trireme Virtus, who said he could not write, that he (namely Antiochus) acted as guarantor for the contract and agreed that the slave Abbas otherwise called Eutyches and the price of 200 denarii should be confirmed under his responsibility and authority as it is above written.

(Fourth hand) I, Gaius Arruntius Valens, a *suboptio* of the trireme Salus, subscribe (as witness).

(Fifth hand) I, Gaius Julius Isidorus, a *centurio* of the trireme Providentia, subscribe (as witness).

(Sixth hand) I, Gaius Julius Demetrius, a chief trumpeter of the trireme Virtus, subscribe (as witness).

(Seventh hand) I, Publius Domitius - - - of the trireme Providentia, subscribe (as witness).

(Eighth hand) (Greek) In the year 274 on the 22nd of the (month) Artemisius. I, Domitius Germanus, tax-farmer (of the sales made on the *via*?) Quintana [in the camp of the fleet from] Misenum, have received the ten per cent(?) tax on the sale of the slave Abbas also called Eutyches." See also *Econ. Survey*, II, 280.

<sup>18</sup> Dura Pg. 20 (from *Yale Class. Stud.*, V, 96 f.). c. May, 243 A. D. Edessa.

(Syriac): "In the sixth year of Emperor Caesar Marcus Antonius Gordianus

iv. *Education*

Antioch on the Orontes—after Rome, Alexandria and (at certain periods) Seleuceia on the Tigris—the greatest city of the ancient world, was the home of important philosophic, medical and rhetorical

Pius Felix Augustus; in the consulship of Annius Arraninus and Tribonius Papius; in the month Iyar of the year 554 of the former reckoning, and in the year 31 of the freedom of the illustrious (city) Antonin(iana) Edessa, the Colonia Metropolis Aurelia Alexandria; in the term of residence of Marcus Aurelius Antiochus, eques Romanus, son of Belsu; and in the "strategia" of Marcus Aurelius Abgar, eques Romanus, son of Ma'nu son of Agga, and of Abgar, son of Hafsai son of Bar-Kammar (?), for the second time; on the ninth day of the aforesaid month.

The contractant Marcia Aurelia, daughter of Samenbaraz son of Abgar, the seller, declares to Lucius Aurelius Tiro, son of Bar-Belsamen, of Carrhae: I have received from him 700 denarii and have sold to him Amath-Sin, my slave girl, whose age will be 28 years more or less, a captive, in such wise that from this day and for all the future you, Tiro the buyer, and your heirs, shall have full power over this maid whom I have sold to you, to possess and to govern, and to do with her whatever you may wish. And if any man shall contend or talk, either from (the family of) Tiro the buyer or from his heirs, as to the insanity of this maid whom I have sold to him, then I, the contractant, the seller, or my heirs, will contend in advance that I wipe away (the charge) and am clear of blame; and I will establish it to the ill-fortune of Tiro the buyer. It is not lawful to alter this contract in any way. I sell you this slave-girl while I confirm a certain law, that from now until (the expiration of) six months (the parties?) are free of obligation. And thus it was agreed between them. And if this slave-girl shall run away, from this day onward it shall be at the risk of Tiro the buyer.

Two documents of this sale have been written. One copy retained for record is to be put in the archive of the renowned (city) Antonin(iana) Edessa, and the other, a duplicate, shall be in the possession of Tiro the buyer.

I, Aurelius Hafsai son of Samasyabh, archon of the twelfth tribe, declare that I have written in behalf of the contractant, Aurelia, my wife, in the subscription of a document not to be corrupted, that she has sold this slave-girl of hers and has received the price thereof, according to what is written above.

(2nd Hand) Marcus Aurelius, son of Bel-Bussurabal.

(3rd Hand) Marcus Aurelius, son of Panu-adaggal (?).

(4th Hand) With the signature of the inspector of documents.

(5th Hand) (Greek): Aurelius Mannus, the keeper of the archives of temple and town, testifies.

(1st Hand) I, Marcus Aurelius Belsu son of Muqimu, the scribe, drew up this document.

## VERSO

(6th Hand) The contractant, Aurelia, the seller, daughter of Samnai, testifies in her behalf.

(7th Hand) I, Aurelius Hafsai son of Samasyabh, have set my seal to this document.

(8th Hand) Abgar the *strategos* testifies. (4th Hand) Baorus.

(9th Hand) Abgar son of Barsamya witnesses.

(6th Hand) Aurelia the contractant, daughter of Samnai, the seller, (4th Hand) testifies for herself."

schools as well as of a famous library.<sup>1</sup> Famous rhetors and philosophers from the Roman Near East were Boethus of Sidon in the time of Augustus, Isaëus of Assyria in the late first century, Maximus of Tyre,<sup>2</sup> Hadrian of Tyre<sup>3</sup> in the second century A. D. and the philosopher Porphyrius of Tyre in the third century A. D.;<sup>4</sup> Nikomachos of Gerasa, the rhetor Ariston, the sophist Kerykos and the jurist Plotin—all of Gerasa;<sup>5</sup> the famous sophists Theodoros in the first century, Oinomaos in the second century,<sup>6</sup> Apsines in the third century A. D.—all of Gadara; and Fronto of Emesa in the third century A. D.<sup>7</sup> An Ituraean tribe had its own lawyer.<sup>8</sup> Famous jurists from Syria and Palestine were Domitius Ulpianus of Tyre<sup>9</sup> and perhaps also Aemilius Papinianus<sup>10</sup> and Iulius Paulus.<sup>11</sup> Apamea was the home of the philosopher Numenius in the second century and of some sort of Neoplatonist school in the third century A. D.<sup>12</sup> The study of astronomy and mathematics flourished particularly in Sidon.<sup>13</sup> Art, philosophy and literature were well patronized at the court of Zenobia, queen of Palmyra.<sup>14</sup>

Other important figures from the Roman Near East were the geographer Marinus of Tyre in the second century A. D.;<sup>15</sup> the poet A.

(At the head of the text on the recto stands a memorandum in a different hand, not yet read with certainty. According to Professor Torrey's tentative reading, it may be translated as follows:

"By courier (*angaros*) from Menadaggal(?), son of Samenyazin, to Ahuzzam, son of Belsar master of taxes son of Zirzira son of Sila(?).")

(At the foot of the roll, bent around a strip cut in the leather and facing the recto, is a clay seal bearing a bust of the Emperor Gordian III.)

<sup>1</sup> Libanius, *Antioch.* = *Or.* 11, chapters 187 f.; J. Walden, *The Universities of Ancient Greece* (1912), Index s. v. Antioch; Malal., 235.

<sup>2</sup> *R.-E.*, Art. Boethos nr. 9; Isaïos nr. 2; Maximus nr. 37.

<sup>3</sup> *R.-E.*, Art. Hadrianos nr. 1; Walden, *op. cit.*, Index s. v. Adrian of Tyre.

<sup>4</sup> Christ-Schmidt-Stählin, *Gesch. der Griech. Lit.*, II, Index s. v.

<sup>5</sup> Steph. Byz., *De urb.*, s. v. Gerasa; *R.-E.*, Art. Nikomachos nr. 21.

<sup>6</sup> *R.-E.*, Art. Oinomaos, nr. 5; Theodoros, nr. 39; Christ-Schmidt-Stählin, II, Index s. v. Oinomaos.

<sup>7</sup> *R.-E.*, Art. Apsines, Longinos.

<sup>8</sup> Le Bas-Waddington, nr. 2220.

<sup>9</sup> *R.-E.*, Art. Domitius, 88.

<sup>10</sup> *R.-E.*, Art. Aemilius, 105; *Prosop. Imp. Rom.* (second ed.), I, 65/6.

<sup>11</sup> *R.-E.*, s. v.

<sup>12</sup> Bouchier, *Syria*, 130 f.; Christ-Schmidt-Stählin, II, Index s. v. Numenius; *R.-E.*, Art. Amelius, Sopatros. See note 4.

<sup>13</sup> Bouchier, 135 on Strabo, XVI, C 757 § 24.

<sup>14</sup> Bouchier, 130 f., 144; *R.-E.*, Art. Longinos.

<sup>15</sup> *R.-E.*, Art. Marinus nr. 2.

Licinius Archias of Antioch, who lived in Rome at the time of Cicero; the philosopher and poet Philodemos of Gadara, who lived in Rome at the time of Caesar and Augustus;<sup>16</sup> the sophist Heliodoros from Arabia in the third century A. D.;<sup>17</sup> the astrologer Vettius Valens of Antioch and the author Hermippos of Berytus in the second century A. D.;<sup>18</sup> Bardesanes of Edessa, the genius of early Syriac literature in the second century A. D.;<sup>19</sup> the novelist Jamblichos of Antioch in the second century A. D.,<sup>20</sup> and Heliodoros of Emesa in the third century A. D.;<sup>21</sup> Nikolaos of Damascus, the famous historian of the Augustan Age;<sup>22</sup> the Phoenician historian Herennius Philo of Byblus;<sup>23</sup> the Jewish historian Flavius Josephus and his rival Justus of Tiberias,<sup>24</sup> and the Latin authors of the first century A. D., Publilius Syrus of Antioch<sup>25</sup> and M. Valerius Probus of Berytus.<sup>26</sup> In addition, we have two epigrams from the tombs of another Latin poet and of a Greek rhetor who had lived and were buried in Syria.<sup>27</sup> Some astrologers are mentioned in inscriptions from Palmyra.<sup>28</sup> Lucian of Samosata was a lawyer in Antioch in his earlier days and lived later as a famous philosopher and rhetor in Samosata and Antioch.<sup>29</sup> The philosopher Peregrinus Proteus taught for some time in Palestine;<sup>30</sup> Amelius, in Apamea; Longinos, in Palmyra (see notes 12 and 14). Berytus was the centre of a famous school of law, rhetoric and medicine,<sup>31</sup> the conduct of whose students was notoriously dissolute. Seleucia on the Tigris in the Parthian Empire, during the second century A. D. near the Roman frontier, had nearly the same facilities for philosophical, rhetorical and scientific studies as Antioch.<sup>32</sup> Sidon had its own

<sup>16</sup> *R.-E.*, Art. Archias nr. 20; Christ-Schmidt-Stählin, II, Index s. v. Philodemos.

<sup>17</sup> *R.-E.*, Art. Heliodoros nr. 14.

<sup>18</sup> *R.-E.*, Art. Hermippos; Christ-Schmidt-Stählin, II, Index s. v. Vettius.

<sup>19</sup> *R.-E.*, Art. s. v.

<sup>20</sup> *R.-E.*, Art. s. v.

<sup>22</sup> *R.-E.*, Art. Nikolaos nr. 20.

<sup>21</sup> *R.-E.*, Art. Heliodoros nr. 15.

<sup>23</sup> *R.-E.*, Art. Sanchuniathon.

<sup>24</sup> M. P. Charlesworth, *Five Men* (1936), 65 f.; *R.-E.*, Art. Josephus, Justus.

<sup>25</sup> Schanz-Hosius, *Gesch. der röm. Lit.*, I<sup>a</sup>, Index s. v. Publilius.

<sup>26</sup> Schanz-Hosius, II<sup>a</sup>, Index, s. v. Probus.

<sup>27</sup> Cagnat, 1217, 1253.

<sup>29</sup> *R.-E.*, Art. Lukianos.

<sup>28</sup> H. Ingholt, *Berytus*, IV (1934), 39.

<sup>30</sup> *R.-E.*, Art. Peregrinus.

<sup>31</sup> H. Schemmel, *Phil. Woch.*, XLIII (1923), 236 f.; Walden, Index s. v. Berytos; Bouchier, 115 f.; P. Collinet, *Syria*, V (1924), 359 f.; P. Collinet, *Histoire de l'école de droit de Beyrouth, Etudes hist. sur le Droit de Justinien*, II (1925); B. Violet, "Die palästinischen Märtyrer des Eusebius von Caesarea," in Gebhardt-Harnack, *Teate und Unters.*, XIV (1894), 24, 85.

<sup>32</sup> *R.-E.*, Art. Seleukeia, 1169/70.

rhetorical school.<sup>33</sup> Schools of rhetoric in the late Roman time were to be found in Apamea, Caesarea, Chalcis, Gaza and Tyre, which perhaps had been instituted long before the fourth century A. D.<sup>34</sup>

The medical schools of the Roman Near East, especially those of Antioch and Berytus (see notes 1 and 31) as well as the Sassanian medical school of Gondeshapur in Susiana (to which the founder, the Sassanian king Sapor I, in the third century A. D. introduced western doctors),<sup>35</sup> were responsible for the transmission of Greek medicine to the Islamic civilization. Famous medical authorities of the Near East during the time of the Principate were the ingenious Archigenes of Apamea, who lived in Rome under Trajan and had many pupils;<sup>36</sup> Themison of the Syrian Laodicea, who lived in Rome under Augustus;<sup>37</sup> and Meges of Sidon in the first century A. D.<sup>38</sup> The Christian martyrs Kosmas and Damianus practised the profession of doctor in the Cyrrhestice during the third century.<sup>39</sup> It is doubtful whether Theodas, a doctor of the early second century A. D., was born in the Syrian Laodicea or in Laodicea on the Lycos in Asia Minor.<sup>40</sup> The Talmud mentions the names of many Jewish doctors.<sup>41</sup> Inscriptions give us evidence of not a few doctors in Palmyra and elsewhere in Syria.<sup>42</sup> Little towns and villages had sometimes ἀρχιατροί,<sup>43</sup> or even two ιατροπομῆς.<sup>44</sup> Laodicea on the Lebanon was the home of an ιατρὸς Σεβαστοῦ.<sup>45</sup> According to the Talmud doctors and midwives could be found in all fair-sized Jewish communities.<sup>46</sup>

<sup>33</sup> Strabo, XVI, C 757 § 24; Walden, Index s. v.

<sup>34</sup> R. Herzog, "Urkunden zur Hochschulpolitik der römischen Kaiser," *Sitz. Preuss. Ak. Phil.-Hist. Kl.* (1936), 967 f., and especially 988/9, 1009; Walden, Index s. v.; R.-E., Art. Gaza.

<sup>35</sup> O. Temkin, "Geschichte des Hippokratismus im ausgehenden Altertum," *Kyklos*, IV (1932), 49 f. with bibliography; A. Christensen, "L'Iran sous les Sassanides," *Annales du Musée Guimet*, XLVIII (1936), 417 f., Index s. v. Gundéshāpuhr.

<sup>36</sup> R.-E., Art. Archigenes; M. Wellmann, "Archigenes und die pneumatische Schule," *Wilam.-Kiehl. Philol. Unters.*, XIV (1895).

<sup>37</sup> R.-E., Art. Themison nr. 7.

<sup>38</sup> R.-E., Art. Meges nr. 4.

<sup>39</sup> Malal., XII, 304/5; R.-E., Art. Kyrrhos, Syria, 1706.

<sup>40</sup> R.-E., Art. Themison, 1633; Theodas.

<sup>41</sup> Krauss, I, 264 f.; see also Joseph., *Vita*, 37, 185; *Bab. Shabb.* 133b.

<sup>42</sup> H. Ingholt, *Berytus*, II (1935), 91 note 184, 97, 99, 100. For *Sew. Pompeius Carpus, medicus domo Antiochiae Suriae*, who lived as far away from his country as Aquincum on the Danube, see V. Kuszinsky, *Aquincum* (1934), 66 nr. 282.

<sup>43</sup> Cagnat, 1333.

<sup>44</sup> *Année épigr.*, 1921, nr. 96.

<sup>45</sup> Cagnat, 1061.

<sup>46</sup> W. Ebstien, *Die Medizin im Neuen Testament und im Talmud* (1903), 156 f., 213 f.

Even small Jewish communities appointed official teachers, apart from private tutors, for the education of the boys, and sometimes even Greek was taught to boys and girls.<sup>47</sup> Everywhere in Syria there were schools where children could learn reading, writing and simple arithmetic, and also more advanced schools for education in Greek and Roman culture.<sup>48</sup> The Emperor Probus gave orders that the teachers of Antioch should participate in *σιτήσεις* during each year; consequently the costs of education decreased.<sup>49</sup> Malchion, the leader of a Christian group in the third century A. D., was one of these teachers *τῶν ἐν Ἀντιοχείας Ἑλληνικῶν παιδευτηρίων*.<sup>50</sup>

The great Talmudic schools of the time were situated in Palestine and in Babylonia,<sup>51</sup> and like other philosophic schools they seem to have had certain exemptions from liturgies under Antoninus Pius and other Emperors.<sup>52</sup> The Christian scholars and scientists, Kosmas, Damianus and Peregrinus Proteus, have been mentioned above. Pamphilos of Berytus, a student of the universities of that town, and his pupil, Eusebius of Caesarea in Palestine, founded in the latter city a Christian school of great importance.<sup>53</sup> Other well-known Christian writers of the first three centuries A. D. were Ariston of Pella, Basileides of Syria, Beryllos of Bostra, Justinus Martyr of Nablus, Tatianus of Assyria (= *provincia Mesopotamia*?)<sup>54</sup> and the older group of the "School of Antioch."<sup>55</sup> Many Christian communities, as early as the second and third century A. D., considered it their duty to have not only a church but also a library.<sup>56</sup>

<sup>47</sup> Krauss, II, 18 f.; III, chapter 12; A. Büchler, *Der gal. Amhaarez* (1906), 274 f.; S. W. Baron, *Social and Religious History of the Jews* (1936), I, 247 f., 285 f.

<sup>48</sup> Cagnat, 1193. For a gymnasium in Akko see M. Avi-Yonah, *Quart. Dep. Antig. Pal.*, V (1936), 144; Joseph., *Bell.*, I, 21, 11, 411, for a gymnasium in Sidon, *S. E. G.*, II, 842. See also I. Ziegler, 419 f. For gymnasiarchs at Gerasa see *O. G. I. S.*, 622 = Cagnat, 1351.

<sup>49</sup> Malal., XII, 302.

<sup>50</sup> Euseb., *Hist. Eccl.*, VII, 29.

<sup>51</sup> A. Büchler, *Der gal. Amhaarez* (1906), 253 f.; A. Büchler, *The Political and the Social Leaders of the Jewish Community of Sepphoris*, *Jews' College Publ.*, I (1909), chapters IV and V.

<sup>52</sup> S. Klein, *Monatsschr. Gesch. Wiss. Jud.*, LXXVIII (1934), 168 f.

<sup>53</sup> *R.-E.*, Art. Eusebius.

<sup>54</sup> *R.-E.*, Art. Ariston nr. 59; Beryllos nr. 2; Basileides nr. 12; Justinus nr. 11; Tatianus nr. 9.

<sup>55</sup> *R.-E.*, Art. Antiochenische Schule; Theophilus nr. 17; Christ-Schmidt, *Gesch. der Griech. Lit.*, II, 2 §§ 993 f.

<sup>56</sup> *R.-E.*, Art. Bibliothek, 420 f.; for similar Jewish tendencies see Krauss, III, 179.

The Talmud, Greek and Aramaic inscriptions often mention professional scribes, town clerks and court secretaries:<sup>57</sup> "*libellarii*" were employed by illiterates; besides "*notarii*" for writers of shorthand, "*secretarii*" and "*correctores*" are found as foreign words in the Talmud. The Roman officials needed interpreters.<sup>58</sup> Since the wages of the scribes were low,<sup>59</sup> they were usually very poor.<sup>60</sup> Not only documents and books in Greek and Latin but also those in Hebrew, Aramaic, Syriac, Pahlavi, and even until to the first century A. D. those in cuneiform script provided work for these scribes.

It is safe to say that the Roman Near East paid more attention to culture than most other provinces of the Roman Empire, though perhaps Asia Minor and Greece had attained a similar cultural level. The most important centres were: Antioch on the Orontes for philosophy, medicine, rhetoric, astrology, Christian theology, poetry and novel-writing; Emesa for rhetoric and novel-writing; Berytus for law, rhetoric, philosophy, medicine, Christian theology and history; Damascus for rhetoric and history; Chalcis for rhetoric; Apamea for medicine, philosophy and rhetoric; Laodicea for medicine; Palmyra during the third century A. D. for arts and philosophy; Tyre for law, rhetoric, philosophy and geography; Sidon for rhetoric, philosophy, medicine, astronomy and mathematics; Caesarea in Palestine for philosophy, rhetoric and Christian theology, Gaza for rhetoric; Jabne, Tiberias, Sepphoris and Scythopolis for Jewish theology; Gerasa for rhetoric, philosophy and law; Gadara for rhetoric and poetry; several Transjordanian and Mesopotamian centres for Christian theology; Edessa for Syriac literature; and Seleucia on the Tigris for Greek philosophy, rhetoric and geography.

#### v. Marriage and Divorce, Nursing Contracts, Burial Expenses

Some marriage and divorce contracts from the Roman Near East<sup>1</sup>

<sup>57</sup> Krauss, III, 135 f., 166 f.; Cagnat, 1071 (*librarius*); 1074 (*σαφάρα* = Syr. *scriba*); *O. I. S.*, II, 1, nr. 416 (tomb of a "*lector et scriba*" from Petra); Dura Pg. 20 (Syriac scribe); *S. E. G.*, VII, 196 (*καλλιγράφισσα*).

<sup>58</sup> Cagnat, 1191. See also Philostr., *Apoll.*, I, 8.

<sup>59</sup> *Bab. Baba Mezia* 16b.

<sup>60</sup> *Bab. Pesach*. 50b.

<sup>1</sup> Dura Pg. 74.

1st October, 232 A. D.

Dura Europos.

*Dura Rep.*, VI, 434.

"In the consulship of Virius Lupus and Marius Maximus on the Kalends of October, which is the first of the month Hyperberetaeus, in the *canabae* by the

are extant, and the Talmud contains many discussions and decisions on questions of marriage and divorce.<sup>2</sup>

Dura Pg. 22

April 204 A. D.

Ossa.

"In the second consulship of Lucius Fabius Cylo and in the first of Annius Flavius Libo, in the twelfth year of the reign of the Emperor Caesar Lucius Septimius Severus Pertinax Augustus, in the tenth of Marcus Aurelius Antoninus Augustus and in the seventh of Lucius Septimius Geta Caesar, his sons the Augusti, and in the year 515 according to the former calendar, on the fourth of the month Artemisius (April 204 A. D.), in the village of Ossa, in the presence of the subscribing witnesses.

Nabousamaos, the son of Konon and grandson of Abissaios, and Akozzis, the daughter of Seleucus and granddaughter of Abissaios, both from the village of Ossa, declare that up to this time they have been living together in unwritten marriage and have had no children. They are now dissatisfied with their union and have come to an agreement to separate and to grant one another permission and allowance, Nabousamaos to Akozzis that she may marry any man she chooses, and Akozzis to Nabousamaos that he may marry any woman he wishes. They are not to take legal action now or in the future against one another either concerning their former union or in the interest of their heirs or concerning some written marriage contract in their names. In case such a document should exist or should be remaining from earlier times, this agreement shall remain valid wherever it is submitted. They have questioned one another in good faith and have come to a total agreement with one another without recourse to deceit in this or any other matter. But if legal action should be taken by anyone of them it should be invalid, and the guilty party should pay to the other without question or legal decision 3,000 silver *denarii* and the same sum to the *fiscus*; and this divorce contract shall nevertheless remain valid. Witnesses: Zabeinas, son of Adaios, and Abissaios, son of Abissaios.

(Second hand) I, Nabousamaos, the son of Konon, the person mentioned above, am well content to abide by the above written articles.

winter quarters of the Cohors Duodecima . . . Palaestinatorum Severiana Alexandriana. Good Luck. There have agreed and contracted with each other this day Aurelius Alexander, a soldier of the above cohort in the century of Papias, and Aurelia Marcellina, a daughter of Marcellinus, resident in the *canabae* in the presence of . . . na her mother and Agrippinus her brother, Marcellina on the one hand to give herself out of widowhood to marriage union with Alexander. . . ."

(The text continues with a list of dower articles [with the value of each given in *denarii*], but the conclusion is almost entirely lost. At the foot were the signatures of the two parties and probably of witnesses also.)

For Dura see also: Pg. 21.

<sup>2</sup> Krauss, II, 24 f., 43 f., 50 f.; S. W. Baron, *Social and Religious History of the Jews* (1937), I, 263 f., 270 f., III, 68; I. Herzog, *Main Institutions of Jewish Law*, I (1936), Index s. v. marriage; A. Gulak, *Études de Papyrologie*, I (1932), 101 f.



(Third hand) I, Barnaios, the son of Lysias, acting on request for my mother Akozzis, have signed this with the full consent of that party.

(Fourth hand) I, Julius Germanus, a veteran, subscribe as witness.

(Fifth hand) I, Zabeinas, son of Adaios, subscribe as witness.

(Sixth hand) I, Abissaios, son of Abissaios, subscribe as witness.

(Seventh hand) (The document) has been (legally) unrolled in the registry."

Marriage and divorce by written document prevailed amongst the upper and middle classes, though legal marriage unratified by document was also possible and generally adopted by the poor. Furthermore, we find that in the Roman Near East, as in Egypt, there existed the institution of marriage expiring after a defined time. Contracts for marriage and divorce were usually kept in public archives provided that they contained settlements on landed or other values. In Antioch a dowry of 5,000 drachmae was only a moderate amount for the daughter of a distinguished citizen.<sup>3</sup> According to the Talmud the smallest dowry was fifty denarii, but much higher sums occur.<sup>4</sup> Much larger sums than the one hundred denarii required of a Jewish bridegroom to his bride were often paid.

There must have been nursing contracts in the Roman Near East similar to those found in Egypt. The Talmud mentions that a nursing period of two years was usual for mothers as well as for paid nurses, and gives certain prescriptions.<sup>5</sup> Hitherto, however, we have been unable to appreciate how the terms of such contracts varied.

The ceremonies in honor of the dead were very costly in accordance with the customs of the period.<sup>6</sup> Literary sources which mention such events are not very numerous, but we have much archaeological evidence from the imposing tombs of the wealthy as well as from the numerous and not always uninteresting graves of the humbler classes.<sup>7</sup> Severe

<sup>3</sup> Philostr., *Apoll.*, VI, 39.

<sup>4</sup> Krauss, II, 43 f.; Baron, I, 271 on M. *Kethub.* VI 6; VIII 5, etc.

<sup>5</sup> Krauss, II, 9 f. *passim*.

<sup>6</sup> *R.-E.*, Art. Bestattung, Collegium; *Dar.-Saglio*, Art. funus, sepulcrum, Index p. 11 s. v. funéraire, p. 12 s. v. funéraires, p. 19 s. v. funérailles.

<sup>7</sup> For Palmyra see A. Gabriel, *Syria*, VII (1926), 90 f.; *O. G. I. S.*, 630; 636; Cagnat, nr. 1034, 1055; *C. I. S.*, II, 1 *passim*; II, 2, 1 *passim*; II, 3, 1 *passim*. For Dura and Palmyra see *Dura Rep.* (Cumont), 273 f.; R. du Mesnil du Buisson, *Rev. Etud. Juives*, C bis (1936), XVII f. For Sidon see G. Contenau, *Syria*, I (1920), 18 f., 125 f., 136 f., 198 f., 287 f.; V (1924), 123 f. For Tyre see D. de Laseur,

punishment was imposed on those who dared to violate a grave.<sup>8</sup> We have considerable Talmudic evidence of the burial customs and ceremonies of the Jews in the Roman Near East, on which recent excavations have also shed new light.<sup>9</sup> The heavy expenses incurred for burials which caused strong class differences among the Jews were to a very large extent lessened by the rabbinical law of our period, especially regarding the burial shroud (see the prices in § VII). Before these Talmudic decisions became law, burials sometimes made wealthy people poor.

It is unfortunate that we have so few details of the cost of the excavated tombs in the Roman Near East. The price of a sixth of a tomb at Palmyra amounted to c. 120 denarii in 171 A. D.<sup>10</sup> This sum approximately equals the cost of living for an adult for a whole year.

Other prices of tombs which we have from the Hauran of the fourth century A. D. are not very helpful because we do not know the value of the sums mentioned during the inflation of the *denarius* at this time. The indications of the tomb inscriptions from the Hauran, however, might be very useful as soon as we are able to understand the alterations in the exchange value of the *denarius* during that period.

A. D. 325 (?) *Publ. Princeton Univ. Arch. Exp.*, III A, 2, Salchad: 12,000 Syr. drachm.

342 Le Bas-Waddington, 2036, Imtan: 15,000 denarii.

345 Le Bas-Waddington, 1999, Salchad: 130,000 (drachmae or) denarii.

*Syria*, III (1922), 13 f. For other regions see Lucian, *Charon*, 22; F. Cumont, *Syria*, X (1929), 217 f.; R. Mouterde, *Syria*, X (1929), 238 f.; M. Cheihab, *Syria*, XV (1934), 337 f., XVI (1935), 51 f.; M. Avi-Yonah, *Quart. Dep. Antiq. Pal.*, V (1936), 143 f. *passim*; Th. Wiegand, *Baalbek*, I (1921), 37 f.; F. Cumont, *L'Antiquité Classique*, IV (1935), 191 f.; M. Dunand, *Le Musée de Soueida* (1934), 44 f.; *S. E. G.*, VIII, 3, 9-11, 27, 28, 46, 83-90, 92, 94, 100, 101, 135, 137-139, 141-143, 145, 179-186, 196, 197, 200-202, 204-210.

<sup>8</sup> See Cagnat, 1010, 1175; *C. I. S.*, II, 1, nr. 197, 198, 199, 200, 211, 212, 214, 217, 219, 220, 223, 224; II, 3, I, nr. 4214, 4215, 4217; *C. I. L.*, III, 168; W. Liebenam, *Städteverwaltung im römischen Kaiserreiche* (1900), 45 f., 53 f.; G. M. Harper, *Yale Class. Stud.*, I (1928), 147 f.; and especially for *S. E. G.*, VIII, 13, a famous inscription of Nazareth, with bibliography, S. Loesch, *Diatagma Kaisaros* (1936); W. Seston, "Encore l'inscription de Nazareth," *Rev. Phil.*, LXIII (1937), 125 f.; L. Wenger, *Savigny Zeitschrift Rom. Abt.*, LI (1931), 369 f.

<sup>9</sup> Galling, *Bibl. Reallew.*, Art. Grab, Ossuar, Sarkophag; Krauss, II, 54 f.; Loew, *Flora*, I, 144 f.; E. T. Sukenik, *Pal. Or. Soc. Journ.*, XII (1932), 22 f.; Büchler, *Jews' College Publ.*, IV (1912), 42; *Bab. Kethub.* 8b; *Pal. Berakh.* III 6a, 34.

<sup>10</sup> Cantineau, *Rev. Bibl.* (1930), nr. 14, p. 548, l. 4 = Th. Wiegand, *Palmyra* (1932), 11/2.

- 350 Le Bas-Waddington, 2037, Imtan: 11,000 Syr. drachmae.  
 350 Le Bas-Waddington, 2053, El-Meschkuk: 10,000 denarii.  
 351 Le Bas-Waddington, 2000, Salchad: 70,000 Syr. drachmae  
 (?).  
 390 Bleckmann, *Zeitschr. Pal. Ver.*, XXXVIII (1915), 223 f.,  
 Salchad: 20-30,000 denarii (?).

### vi. Amusements

Antioch was a town of gaiety and pleasure: theatres, amphitheatres, stadia, hippodromes and baths abounded. Other towns did not fall far short of it,<sup>1</sup> since endowments were provided for the different amuse-

<sup>1</sup> Malal., IX, 216/17; 222; 224/5; X, 233/5; 243/4; 261/2; 263; XI, 275/7; 278/9; 282; 283/5; 290; 294/5; 300; 302; 306/8; 314; Liban., *Ant.*, = *Or.* II, chapters 218 f.; *O. G. I. S.*, 603; Cagnat, 1012 = *S. E. G.*, VII, 73; Symmach. *Ep.*, IV, 62; W. A. Campbell, *Am. Journ. Arch.*, XXXVIII (1934), 204 f.; Bouchier, *Syria*, 64, 65, 68, 70, 73 f., 79 f.; G. Downey, in *Class. Phil.*, XXXII (1937), 144 f.; W. Hüttl, *Antoninus Pius*, I (1937), 291/2; *Rev. Et. Grecq.*, L (1937), 95 (Antioch); Joseph., *Bell.*, I, 21, 11, 422 (Sidon); B. Violet, "Die pal. Märt. des Eus.," in Gebh.-Harnack, XIV, 4 (1896), 19, 48 f., 58; Malal., X, 261; XI, 281; *R.-E.*, Art. Caesarea nr. 10; J. Jeremias, *Paläst. Zeitschr. Paläst. Ver.*, LIV (1931), 279 f.; O. H. Knight, *Pal. Expl. Quart. Stat.*, LII (1920), 79 f.; M. Avi-Yonah, *Quart. Dep. Antiq. Pal.*, V (1936), 150 (Caesarea); J. W. Crowfoot, *Pal. Expl. Quart. Stat.*, LXV (1933), 62 f.; Avi-Yonah, *op. cit.*, 163 (Samaria); J. W. Crowfoot, *Pal. Expl. Quart. Stat.*, LXVIII (1936), 7 (Bostra); Bouchier, *op. cit.*, 21 (Damascus); Joseph., *Bell.*, I, 21, 11, 422; *Ant.*, XIX, 7, 5, 335 f.; XX, 9, 4, 211; Bouchier, *op. cit.*, 114/5 (Berytus); E. T. Sukenik, *Pal. Orient. Soc. Journ.*, XV (1935), 101 f. (El-Hammeh); *S. E. G.*, VII, 813; 825; 841; 842; 843; 809; 900; 906; H. Ingholt, *Berytus*, III (1936), 109 f. (Gerasa); *R.-E.*, Art. Gabala, Gadara; Avi-Yonah, *op. cit.*, 168 (Gabala, Gadara); Th. Wiegand, *Baalbek*, II (1923), 90 f., 147 f. (Baalbek); *S. E. G.*, II, 529 (Apamea); Malal., IX, 223; XI, 280; XII, 294; *S. E. G.*, VII, 152; 171; *Année ép.*, 1932, nr. 79; H. Ingholt, *Berytus*, III (1936), 109 f.; *C. I. S.*, II, 3, I, nr. 3919; 3970 (symposiarchus) (Palmyra); *Dura Rep.*, II, 18 f., 61 f.; VI, 49 f., 84 f.; H. Ingholt, *Berytus*, III (1936), 109 f.; *S. E. G.*, VII, 345 (Dura); Cagnat, 1235 (Kanatha); Eusebius, *Hist. Eccl.*, VIII, 13, 308 (Emesa); Avi-Yonah, *op. cit.*, 146; *R.-E.*, Art. Jerusalem, 947; Herodes (Suppl. II, 104) (Jerusalem); Galling, *Bibl. Realex.*, Art. Bad und Baden; Malal., X, 235; *R.-E.*, Kallirhoe; Tiberias (baths near the Dead Sea, Tiberias, Gadara, Kallirhoe and Gezer); see also Le Bas-Waddington, III, nr. 2029; 2070; 2480; *S. E. G.*, VII, 71 (Meez); Cagnat, 1165 (public baths of a village); 1192 (village theatre); Krauss, I, 217 f. (Akko, Bostra and Tiberias); III, 113 f. For Palestine see especially Avi-Yonah, *op. cit.*, 144 (Akko), 145 (Efa), 151 (Mamas), 164 (Jericho), 167 (Seythopolis), 168 (Emmatha, Legio), 169 (Sepphoris), 172 (Tiberias), 175 (Hippos), for Jewish theatre enterprises and theatre employees see *Pal. Abod. Zara* 40a 39; *Bab. Abod. Zara* 18b; *Pal. Taan.* I, 4, 64h 54. For Antioch, Laodicea, Tyre, Berytus, Caesarea, Heliopolis, Gaza, Ascalon and Castabala during the Byzantine period see also *Tot. Orb. Terr. Descr.*, in Müller, *Geogr. Graec. Min.*, II, p. 519 § 32. See also A. Schenk von Stauffenberg, *Die römische Kaisergeschichte bei Malalas* (1931), Index s. v. Antiochien, Caesarea, Daphne, Emesa, Laodikeia.

ments in Antioch,<sup>2</sup> in Laodicea,<sup>3</sup> especially from the time of Septimius Severus, in Berytus,<sup>4</sup> in Gerasa,<sup>5</sup> in Caesarea of Palestine, Caesarea Panias, Nicopolis in the Seleucis, Tyre, Ascalon, Scythopolis, Sidon, Tripolis, Leucas, Hierapolis, Beroia, Zeugma and Chalcis.<sup>6</sup> As we should expect in an amusement-loving age, we have many accounts of horse racing,<sup>7</sup> musical and dancing displays,<sup>8</sup> theatrical plays<sup>9</sup> and mimes and in the arena shows of gladiators, wild beasts and prisoners of war.<sup>10</sup> The festivals of the Roman state spread to the people in general from the army and the government officials who conducted them; e. g. the Roman *rosaliae*, which according to a very interesting festival calendar from Dura Europos<sup>11</sup> were held by the Roman army of Syria in the third century A. D., were known as *ἡμέρα τῶν ῥόδων* even as late as the sixth century A. D. in Gaza.<sup>12</sup> Finally we find numerous local festivals,<sup>13</sup> the most famous of which was the *Maiumas*.<sup>14</sup> The Talmud speaks of Roman state festivals like *Kalendae*, *Saturnalia*, *Dies Imperii*, *Saecularia* and jubilees, of pagan festivals like *depositio barbae*, *ἐκβατήρια*, *κατιτήρια*, *sigillaria*, *hilaria* and *Maiumas* as well as of private festivals like splendid marriages, elaborate

<sup>2</sup> Malal., IX, 224/5; X, 248/9; XII, 284/9; 296; 309; 310; 311/12; S. H. A., *Marc. Aurel.*, 25; Schenk von Stauffenberg, *op. cit.*, chapter IX.

<sup>3</sup> Malal., XII, 294, 11 f.; O. G. I. S., 603 = Cagnat, 1012.

<sup>4</sup> R.-E., Art. Berytus, 322.

<sup>5</sup> S. E. G., VII, 825; 899; 900.

<sup>6</sup> Cagnat, 1012 = O. G. I. S., 603 = S. E. G., VII, 73.

<sup>7</sup> *Expos. Tot. Mund.*, chapter 32 = *Geogr. Lat. Min.* (ed. Riese), p. 111; Krauss, III, 78 f., 99 f.

<sup>8</sup> Krauss, III, 114.

<sup>9</sup> S. E. G., VII, 825 (Gerasa); Krauss, III, 116 f.

<sup>10</sup> Joseph., *Bell.*, VII, 3, 1, 37-40; VII, 5, 1, 95; Krauss, III, 115 f.; Bouchier, *Syria*, 65, 68, 70, 73 f., 79 f., 114 f.

<sup>11</sup> For Roman state festivals see Krauss, III, 122 f.; for the *rosaliae* see *Dura Rep.*, V, 295/6; A. S. Hoey, "Rosaliae signorum," *Harvard Theol. Rev.*, XXX (1937), 15 f.; R.-E., Art. Rosalia; see also P. Lemmerle, *Bull. Cor. Hell.*, LX (1936), 336 f.

<sup>12</sup> See K. B. Stark, *Gaza* (1852), 598. From the time of Stark the festival of Gaza has been wrongly equated with the Syrian *Maiumas*, although it is well-known that the Roman *rosaliae* spread extensively throughout the East.

<sup>13</sup> L. M. Angus, *Pal. Exc. Quart.*, LII (1920), 158 f.; L. Robert, *Rev. Num.*, 4th Ser., XXXIX (1936), 274 f.; G. F. Hill, *Journ. Rom. Stud.*, VI (1916), 135 f.; Krauss, III, 121 f.; Malal., XI, 270 f.; XII, 283-290; 300; *Dura Report*, VI, 153 f.

<sup>14</sup> R.-E., Art. *Maiumas*; *Myth. Lex.*, Art. *Maiumas*; C. C. McCown, *Journ. Pal. Orient. Soc.*, XVI (1936), 77 f.; Krauss, III, 127; A. Büchler, *Rev. Et. Juives*, XLII (1901), 125 f.; R. Dussaud, *Monum. et Mém.*, XXV (1921/2), 137/8; L. Robert, *Rev. Et. Gr.*, XLIX (1936), 9 f.

banquets and orgies of young people, and of the ordinary and local Jewish festivals.<sup>15</sup> Even one of the Christian martyrs in Syria, Gelasinus from Heliopolis, was an actor.<sup>16</sup> Important amusements of the wealthy upper class of Syria were hunting and fowling.<sup>17</sup>

### vii. *Wages and Living Costs*

The cost of living and the relation between wages and prices varied from region to region. The Talmud states that it was much cheaper to live in Babylonia than in Palestine.<sup>1</sup> Antioch was a very expensive town, and on the average, Palestine and Syria were more expensive than Egypt, as is shown by a comparison of the prices of the most important commodities as well as of the wages (see the following lists). On the other hand prices in Roman and in Persian Mesopotamia were as low as, if not lower than, those of Egypt. The minimum ration of food for a slave or for a hired labourer in the Palestine of the second and third centuries A. D. consisted of a loaf of bread and a dish of vegetables daily.<sup>2</sup> Sometimes there was included a portion of the produce harvested by the workers.<sup>3</sup> The rearing of a child was believed to be comparatively expensive and was difficult in times of stress.<sup>4</sup> In an

<sup>15</sup> Krauss, II, 25; III, 38, 40 f., 99 f., 104 f., 113 f., 115 f. *passim*, 121 f. *passim*; Loew, *Flora*, I, 143 f., 146 f.; *R.-E.*, Art. Herodes (Suppl. II, 104); A. Marmorstein, *Gaster Anniversary Volume* (1936), 409 f.

<sup>16</sup> Malal., XII, 314/5; *R.-E.*, Art. Syria, 1706; Th. Wiegand, *Baalbek*, II (1923), 149.

<sup>17</sup> *R.-E.*, Art. Syria, 1564; Gallig, *Bibl. Realex.*, Art. Jagd (see a hunting relief of our period from Beith-Shean); Dalman, I, 73 f., 167 f., 567/8; Newman, 140 f.; Krauss, II, 143 f., 200 f.; M. Mainzer, *Monatsschr. Gesch. Wiss. Jud.*, LIII (1909), 174 f., 182 f., 303 f.; Joseph., *Bell.*, I, 21, 13, 429/30.

<sup>1</sup> *Bab. Pesach*. 87b; 88a; *Bab. Taanit* 29b (price of dates); Newman, 74 (agriculture); *Bab. Taanit* 10b (wealth of Babylonia); *Bab. Chag.* 25a (cheap corn).

<sup>2</sup> *M. Baba Mezia* VII 1: "One who engages labourers and demands that they commence early or work late—where local usage is not to commence early or work late—may not compel them. Where it is the practice to supply food (to one's labourers), he must supply them therewith; where it is the practice to provide a relish, he must provide it. Everything depends on local custom. It once happened that R. Johanan ben Mathia (second century A. D., Palestine) said to his son: 'Go out and engage labourers.' He went and agreed to supply them with food. But on his returning to his father the latter said: '... Before they start work, go out and tell them: (I engage you) on condition that you have no claim upon me other than bread and pulse.'"

<sup>3</sup> *M. Baba Mezia* X 5; Krauss, II, 105.

<sup>4</sup> *Bab. Ketub.* 10a; 40b; 50a *finis*; *Bab. Sanh.*, 63b; 98b.

interesting passage<sup>5</sup> of the first or second century A. D. the Talmud specifies the minimum allowance to be made by a husband to his wife: it consisted of a weekly ration of 2 cab of wheat (see note 7) or of 4 cab of barley,  $\frac{1}{2}$  cab of pulse,  $\frac{1}{2}$  log of oil, 1 cab of dried figs or 1 mine of pressed figs or some similar fruit, and a silver maa in cash. Further he had to give her a bed, a mattress, a mat, a covering for her head, an apron, new shoes for every festival and new clothes to the value of fifty denarii each year.<sup>6</sup>

From our knowledge of the prices current in the second century A. D. we are able to calculate the value of the minimum weekly food allowance of a (Jewish) wife as follows:<sup>7</sup>

<sup>5</sup> *M. Ketub. V 8*: "If a man maintains his wife through a trustee, he must give her (every week) not less than two cabs of wheat or four cabs of barley. R. Jose (second century A. D., Palestine) said: 'Only R. Ishmael who lived near Edom granted her a supply of barley.' He must also give her half a cab of pulse, half a log of oil and a cab of dried figs or a mine of pressed figs; and if he has no (such fruit), he must supply her with a corresponding quantity of other fruit. He must also provide her with a bed, a mattress and rush mat. He must also give her (once a year) a cap for her head and a girdle for her loins; shoes (he must give her) each major festival; and clothing (of the value) of fifty denarii every year. She is not to be given new (clothes) in the summer or worn-out clothes in the winter; but must be given the clothing (of the value) of fifty denarii during the winter, and she clothes herself with them when they are worn out during the summer; and the worn-out clothes remain her property. He must also give her (every week) a silver maa for her (other) requirements, if ..... not ....., her handiwork belongs to her. And what (is the quantity of work that) she must do for him? The weight is five stater of warp in Judaea which amounts to ten stater in Galilee, or the weight of ten stater of wool in Judaea, which amounts to twenty stater in Galilee. If she was nursing (her child), her handiwork is reduced and her maintenance is increased. All this applies to the poorest in Israel, but in the case of a member of the better classes all is fixed according to the dignity of his position."

<sup>6</sup> 1 cab =  $3\frac{1}{2}$  — 4 xestai, 1 log =  $\frac{1}{4}$  cab = c. 1 xestes. See Krauss, II, 392 f. The wife's duties to her husband, on the other hand, are defined as follows: *M. Kethub. V 5*: "The following are the kinds of work which a woman must perform for her husband: Grinding corn, baking bread, washing clothes, cooking, suckling her child, making ready his bed and working in wool."

<sup>7</sup> We intend to describe the weights and measures used in the Roman Near East only so far as they differ from those used in other provinces of the Roman Empire and are mentioned in passages to which we referred in this survey. Only a few measures used by the Talmudic authorities have to be recorded here: 1 sea = c. 13.10 lit. = 1 garb = 6 cab = c. 24 log = c. 24 Roman xestae.

Besides these measures we hear of others which had the same names but more or less different values. Many economic difficulties might have come from such differences, which as a rule were regional; e. g. a sea ("of the desert") of c. 6.55 lit. is mentioned by our authorities, and a certain weight called sela (= 1 stater)

2 cab wheat	= $\frac{1}{3}$ — $1\frac{1}{3}$ Syr. as.
$\frac{1}{2}$ cab legumes	= perhaps 1 peruta.
$\frac{1}{2}$ log (olive ?) oil	= c. 1—2 Syr. as.
1 cab dried figs	= c. 1 Syr. as.
<hr/>	
	$2\frac{1}{2}$ — $4\frac{1}{2}$ Syr. as.

The minimum allowance for a year might have been:

Food	= $5\frac{2}{3}$ — $10\frac{1}{4}$ Syr. denarii.
Weekly cash	= $8\frac{2}{3}$ Syr. den.
New clothes	= 50 Syr. den.
House rent	= c. 10—40 Syr. den.
Other expenses	= c. 50 Syr. den.
	$134\frac{1}{3}$ — $188\frac{1}{12}$ Syr. den. = 100—140 imperial den.

According to this calculation the daily minimum expense of a single adult was somewhat less than a half provincial drachma (= 6 imperial asses); this agrees with the daily wages of c. 1 provincial drachma earned by a Palestine workman who had a wife and family. It is recorded that Hillel had to satisfy his own needs and those of his family with a half victoriatum a day, which is less than the sum mentioned above.<sup>8</sup> It is not surprising that according to the Talmud Hillel was a very poor man.

The private fortunes of many of the upper classes in the Roman Near East were considerable: for example, 20,000 drachmae was not considered a very large fortune for a distinguished citizen of Antioch in the reign of Domitian.<sup>9</sup> Family possessions amounting to 9,000 denarii were also not thought very great in Palestine during the same period.<sup>10</sup> Palestinian authorities of the Talmud call a man rich who owned 100 corn fields, 100 vineyards and 100 slaves to work this property.<sup>11</sup>

had in Galilee double the size of that of Judaea. See Krauss, II, 382 f.; A. Segrè, *Metrologia* (1928), 63 f., 508 f.; *Bab. Erub.* 83a. For the Syrian currency see chapter III § IV.

<sup>8</sup> *Bab. Joma* 35b. For wages in Palestine and their peculiarities see Krauss, II, 104 f.

<sup>9</sup> Philostr., *Apoll.*, VI, chapter 39.

<sup>10</sup> Euseb., *Hist. Ecol.*, III, 20. See chapt. I § III.

<sup>11</sup> See also *Bab. Erub.* 86a: "Once upon a time Bonjos ben Bonjos (a wealthy man) came to Rabbi (135—c. 210 A. D., Sepphoris) who called out: 'Make way for the man who possesses 10,000 denarii.' Then another came and he called out again: 'Make way for the man who possesses 20,000 denarii.' Then R. Jismael ben Jose said to him: 'Master, the father of that one possesses a thousand ships on the sea and a thousand towns on the main land.'"

*Bab. Shabb.* 25b: "The rabbis taught: 'Who may consider himself rich?' . . . R. Tarphon (first—second century A. D., Lydda) says: 'He who has a hundred fields, a hundred vineyards and a hundred slaves at work in them.'"

On the other hand, *M. Peah* (VIII 8) gives a man with a capital of 200 or even 50 denarii no claim to charity.

*M. Peah* VIII 8, 9: "If a man has two hundred denarii he may not take gleanings, the forgotten sheaf, peah or poorman's tithe. . . . If a man has fifty denarii and he trades with them, he may not take gleanings, the forgotten sheaf, peah, or poorman's tithe."

A property of 10,000 or 20,000 denarii was considered quite a large fortune in the Palestine of the second and third centuries A. D., but this was after the catastrophe of the Jewish rebellions.<sup>12</sup>

*Bab. Hull.* 84a: "R. Eleazar ben Azarja (Domitian—Trajan, Lydda) remarked: 'He who has one mine may buy for his pot one pound of vegetables; with ten mines, a pound of fish for his pot; with fifty mines, a pound of meat. If he has hundred mines, let a pot (of meat) be put up on the fire for him every day.'"

Justus of Antioch, Christian martyr under Diocletian, is said to have possessed 1,800 litra of gold and 1,800 litra of silver in cash, 1,000 vineyards and 1,000 orchards (most probably let out to tenants), 1,000 sea-going ships, 1,000 mules, 800 horses, 1,000 household slaves and 1,000 private soldiers.<sup>13</sup>

The wages and prices from the Roman Near East of which we have knowledge are very informative in view of the regional differences between Mesopotamia, Syria, Palestine and Egypt. The known Palestinian wages are higher than the Egyptian ones (see below and *Economic Survey*, II, 306 f.): the price of 1 sea (= 13.131 lit.) of wheat in Palestine was on an average 1 denarius, that of 1 artaba (= 39.2 lit.) in Roman Egypt ½-2 denarii (*ibid.*, 310 f.). This means that the price of wheat in Palestine was 50 to 600 per cent. higher than the Egyptian one. The price of one loaf of bread in Palestine was ½-1

<sup>12</sup> See Newman, 28 f.; A. Büchler, *Jews' College Publ.*, I (1909), 34 f. For Jewish fortunes in Palestine and Babylonia see *Bab. Erub.* 86a; *Bab. Hull.* 84a. For the property of Demetrius from Gadara, which amounted to 4000 talents, see *Econ. Survey*, I, 393.

<sup>13</sup> *Corpus Script. Christ. Orient., Scriptores Aethiopiici*, ser. II, 28. *Acta Mart.*, VII (1907), 73. See also § III notes 15 and 16.



imperial as, according to its size, in Egypt  $\frac{1}{2}$ -2 obols (*ibid.*, 316), approximately the same regional difference as before. The Palestinian prices of clothes, which we know from Talmudic references of the first and second centuries A. D., are as a rule higher than those of Mesopotamia and Babylonia during the third century A. D. The prices of cattle, landed property, houses, slaves and the house rents mentioned below all point to similar regional differences in the cost of living. The most expensive parts of the Roman Near East seem to have been Antioch and probably other large towns, though Palestine also had a much higher price standard than Egypt. Prices in Mesopotamia and Babylonia, on the other hand, seem to have been as low as those in the Nile country and at times lower.

The price of some products such as corn, oil and wine was so important for the whole population, producers and consumers alike, that their export from Palestine was forbidden by the Talmud; and public prayers were offered in the synagogues when the prices of oil and wine in Palestine and of linen in Babylonia fell to three-fifths the normal market price (*Bab. Baba Bathra* 91a). Our authorities often mention local and general famines. A special economic crisis developed in Palestine after the catastrophe of 70 A. D.: corn was extremely cheap, but it was almost beyond the reach of the consumer because most people had not the opportunity of earning even an as.<sup>14</sup>

### Wages

B. C. II/I cent.	Tob., V, 15, Palestine. Daily wage of the angel Raphael as Tobias' companion: 1 drachma.
A. D. early I cent.	<i>Bab. Joma</i> 35b, Palestine. Daily wage of Hillel: 1 victoriatius.
early I cent.	Matth., XX, 1 f., Palestine. Daily wage of a vineyard-worker: 1 denarius.
I cent. (?)	R. Dussaud, "Comptes d'ouvriers d'une entreprise funéraire juif," <i>Syria</i> , IV (1924), 241 f., Bethphage. Daily wage: 1 denarius or 1 drachma.

<sup>14</sup> See Joseph., *Ant.*, XIV, 2, 2, 28; XV, 9, 1/2, 299 f.; XVIII, 1, 1, 8; XX, 5, 2, 101; *Bab. Taanit* 24b; *Bab. Ketub.* 97, and for the crisis after 70 A. D. see *Bab. Taan.* 19b f. See also K. S. Gapp, *Harvard Theol. Review*, XXVIII (1935), 258 f., chapt. I § I and *Bab. Baba Bathra* 91a: "It is not permitted to go forth from Palestine to a foreign country unless two seas are sold for one tetradrachmon. R. Simeon (second century A. D., Palestine) said: . . . Even if a sea cost a tetradrachmon one must not depart."

121	Dura Pg. 10, Dura. A year's work as a household servant: the interest of 400 Tyr. drachmae, c. 48 drachmae.
II cent.	M. <i>Bekhor</i> . IV 5, Jamnia, Palestine. Ritual examination of a sheep or a goat: 4 asses.
II cent.	M. <i>Bekhor</i> . IV 5, Jamnia, Palestine. Ritual examination of cattle: 6 asses.
c. 230/40	<i>Dura Rep.</i> , V, 66 nr. 405, Dura. Monthly or half-yearly wages: 301-307 denarii.
early III cent.	<i>Bab. Shabb.</i> 129b, Babylonia. Hair-cutting 100 times: 1 denarius.
II/III cent.	<i>Bab. Baba Mezia</i> 16b, Palestine and Babylonia. Wages of scribes: a few peruta.
137	<i>C. I. S.</i> , II, 3, I nr. 3913, Palmyra. Remuneration of a prostitute: 6 asses, 8 asses, 1 denarius and more.
I cent.	<i>Bab. Joma</i> 38a, Jerusalem. Daily (!) wages of craftsmen of the temple (estimate of the second century A. D.): 1,200 denarii (before a strike), 2,400 denarii (after that strike).
early III cent.	<i>Bab. Joma</i> 38a, Palestine. The same wages (new estimate): 2,400 and 4,800 denarii.
before 362	<i>Gen. Rabba</i> 70, 14, Palestine. Daily wages: 6-10 folles.

### Cost of Wheat

B. C. 65	Joseph., <i>Ant.</i> , XIV, 2, 2, 28, Palestine. 1 modius (?): 11 Tyr. (?) drachmae (famine).
A. D. I/II cent.	M. <i>Baba Mezia</i> V 1, Palestine. 1 sea (= 1/30 kor): 5/6-1 denarius.
I/II cent.	M. <i>Maass. Scheni</i> IV 6, Palestine. 1 sea: 4-8 denarii.
early II cent.	<i>Bab. Taanith.</i> 19b, Palestine. 1 sea: 1 denarius (cheap) or 4 denarii (expensive).
100/140	M. <i>Peah</i> VIII 7; M. <i>Erub.</i> VIII 2; M. <i>Kelim</i> XVII 11, Palestine. 1 sea: 1 denarius.
130/160	<i>Bab. Baba Bathra</i> 91a, Palestine. 1 sea: 2-4 denarii (expensive).
early III cent.	M. <i>Baba Mezia</i> V 8, Palestine. 1 sea: 4 denarii.
312/13	Euseb. <i>Hist. Eccl.</i> , IX, 8, Syria/Palestine. Ἐν μέτρῳ (= 1 modius?) πυρῶν: 2,500 Attic drachmae (= denarii).

*Bread, Flour*

A. D. I/II cent.	M. <i>Shek.</i> IV 9, Palestine. 1 sea of wheat flour: 3-4 denarii.
I/II cent.	M. <i>Sebiith</i> VIII 4, Palestine. 1 loaf of bread: 2 Syr. as (= 1 imp. as).
100/140	M. <i>Peah</i> VIII 7; M. <i>Erub.</i> VIII 2; M. <i>Kelim</i> XVII 11, Palestine. 1 loaf of bread: 2 Syr. as (= 1 imp. as).
90/130	M. <i>Erub.</i> VII 1. 1 little loaf of bread: 1 Syr. as (= 1/2 imp. as).
235/40	S. E. G., VII, 411, Dura. Unit of bread: 3 imp. denarii.
c. 300	Papyrus Ryl. ined., Ascalon, Raphia, Rhinocollura. 1 loaf of bread: 100 Egypt. drachmae (= 25 imp. denarii).
c. 350	Gen. <i>Rabba</i> 49, 7, Palestine. 1 loaf of bread: 2 folles.
c. 400 (?)	Tos. <i>Sebiit</i> 6, 21, Palestine. 1 loaf of bread: 10 folles.

*Prices of Wine*

A. D. 134	Dura Pg. 32, Ossa near Dura. 1 ceramion of new wine: 8 1/3 Tyr. drachmae (i. e. 1 xestes = 8 1/3 Syr. assaria = 4 1/6 imp. asses).
early III cent.	M. 112 (ined.), Dura. Unit (1-2 xestai?) of new wine: 1 imp. denarius.
c. Diocletian	Bab. <i>Abod.</i> Zara 34b, Akko. 1 xestes: 4 nummi (nummi = sestertii of Diocletian? See chapt. III § IV).
IV cent.	Gen. <i>Rabba</i> 49, 4, Palestine. 1 xestes: 2 folles.
IV cent.	Lev. <i>Rabba</i> 27, 2, Palestine. 1 xestes: 10 folles.

*Olive Oil*

A. D. 66/67	Joseph., <i>Bell.</i> II, 21, 2 § 591/2, Galilee. 1 amphora: 1 Tyr. drachma (i. e. 1 xestes = 1/2 Syr. as = 1/4 imp. as).
66/67	Joseph., <i>Bell.</i> II, 21, 2 § 591/2, Syria. 1 amphora: 8 Syr. drachmae (i. e. 1 xestes = 4 Syr. asses = 2 imp. asses).

66/67	Joseph., <i>Vita</i> , 13, 74/5, Caesarea Philippi. 1 xestes: $\frac{1}{2}$ Syr. drachma = 12 Syr. asses (= 6 imp. asses).
66/67	Joseph., <i>Vita</i> , 13, 74/5, Galilee. 1 xestes: 96/80 Syr. drachmae = $1\frac{1}{8}$ Syr. as (= $\frac{9}{10}$ imp. as).
I/II cent.	M. <i>Baba Quamma</i> VIII 6, Palestine. 1 cab: 1 Syr. assarion (i. e. 1 xestes = $\frac{3}{7}$ assarion).
I/II cent.	M. <i>Baba Bathra</i> V 9, Palestine. 1 zalochith: 2 Syr. asses.
130/60	<i>Pal. Baba Mezia</i> 4, 2, 9d, 14, Palestine. 100 garb: 10 aurei (i. e. 1 xestes = $3\frac{1}{8}$ Syr. asses).
early III cent. and 235/40	<i>S. E. G.</i> , VII, 413; M. 105 (ined.), Dura. $\frac{1}{2}$ unit (1 or 2 amphorae?): 4-5 denarii.
235/40	<i>S. E. G.</i> , VII, 414, 416, Dura. Unit of the same size: 8-11 denarii (1 xestes = $1\frac{1}{8}$ - $1\frac{2}{8}$ or = $2\frac{2}{8}$ - $3\frac{2}{8}$ imp. asses?).

## Meat

A. D. 130/60	M. <i>Baba Quamma</i> III 9, Palestine. A carcass of cattle: 50 denarii.
late II cent.	M. <i>Baba Quamma</i> III 9, Palestine. A carcass of cattle: 4 denarii.
late II cent.	<i>Bab. Baba Quamma</i> 34b, Palestine. A carcass of cattle: 30 denarii.
II/III cent.	<i>Bab. Choll.</i> 49a, Babylonia. A cooked goose lung: 4 denarii.
c. 350	<i>Gen. Rabba</i> 49, 7, Palestine. 1 <i>litra</i> of meat: 2 folles.

## Fruit

A. D. I/II cent.	M. <i>Meila</i> VI 4, Palestine. 1 pomegranate: 1 peruta.
I/II cent.	M. <i>Meila</i> VI 4, Palestine. 1 ethrog: 1-2 peruta.
t. a. 130/60	M. <i>Maasr.</i> II, 5, Palestine. 5 figs: 1 Syr. as (= $\frac{1}{2}$ imp. as).
135/210	M. <i>Maasr.</i> II, 5, Palestine. 3-4 figs: 1 Syr. as (= $\frac{1}{2}$ imp. as).
I/II cent.	M. <i>Maasr.</i> II, 5, Palestine. 10 figs: 1 Syr. as (= $\frac{1}{2}$ imp. as).
late III cent.	<i>Bab. Pesach.</i> 88a, Babylonia. 3 baskets of dates: 1 Syr. denarius.

*Miscellaneous Foodstuffs*

- A. D. I/II cent. M. *Baba Bathra* IX 4, Palestine. Cheapest meal of the bridegroom: 1 Syr. denarius.
- 70 Joseph., *Bell.*, VI, 3, 3, 199, Jerusalem. Στραθμός τὰς ἡνέας συλλέγοντες (famine): 4 Attic drachmae (= imp. denarii?).
- Diocletian Bab. *Aboda Zara* 34b, Akko. 1 xestes of muries: 1 nummus (= 1 sestertius of Diocletian?).

*Clothing, etc.*

- A. D. I cent. M. *Joma* III 7. Suits of high priests: 800, 1,200 and 1,800 denarii.
- I cent. Bab. *Joma* 35b, Jerusalem. Suits of high priests: 10,000 and 20,000 denarii.
- III cent. Pal. *Kilaim* 9, 1; 32a 8, Palestine. Expensive suits of rabbis of the I and II centuries (later estimates): 300,000 denarii each (!).
- I/II cent. M. *Araqu.* VI 5, Palestine. Slave suit: 30 denarii.
- I/II cent. M. *Meila* VI 4, Palestine. Coat: 12 denarii.
- I/II cent. M. *Meila* VI 4, Palestine. Shirt: 12-25 denarii.
- I/II cent. M. *Kethub.* V 8, Palestine. Poor woman's dress for a year: 50 denarii.
- 130/160 M. *Joma* III 6, Palestine. Pelusic linen suit: 1,200 denarii.
- 130/160 M. *Joma* III 6, Palestine. Indian suit: 800 denarii.
- II cent. Bab. *Shabb.* 128a, Palestine. Expensive *stola*: 10,000 denarii.
- middle II cent. Bab. *Baba Quamma* 119b, Palestine. Headcloth: 4-5 denarii.
- III cent. Bab. *Baba Mezia* 114b, Babylonia. Expensive coat: 12,000 denarii.
- III/IV cent. Bab. *Baba Bathra* 91a, Babylonia. Suits: 6 and 10 denarii each.
- IV cent. Bab. *Baba Mezia*; Bab. *Kethub.* 85a, Babylonia. Hemp for shroud: 1 denarius.
- IV cent. Bab. *Moed Katan* 27b, Babylonia. Cheapest shroud: 1 denarius.
- 232 Dura Pg. 74, Dura. Ἐπικάρσιον: 50 denarii.
- 232 Dura Pg. 74, Dura. Πάλλιον λευκόν: 100 denarii.
- 235/40 S. E. G., VII, 417, Dura. Ἀναβόλαιον: 23 denarii.

235/40	<i>S. E. G.</i> , VII, 417, Dura.	Three ἀνίκλια: 23, 23 and 23½ denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Two βαλανάρια: 17½ and 27½ denarii.
235/40	<i>S. E. G.</i> , VII, 423, Dura.	Βαλανάριον: 24 denarii.
235/40	<i>S. E. G.</i> , VII, 419, Dura.	Δελματική: 60 denarii.
235/40	<i>S. E. G.</i> , VII, 420, Dura.	Purple dyed δελματική: 40 denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Two δελματικάι: 17½ and 30 denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Ἐπικάρσιον: 26¾ denarii.
235/40	<i>S. E. G.</i> , VII, 423, Dura.	Shoes (καλίγια): 22 denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Κολόβιον: 17½ denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Κολόβιον δελματικόν: 22 denarii.
235/40	<i>S. E. G.</i> , VII, 423, Dura.	Three λωδίκια: 32, 36 and 36 denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Μακρόχειρον: 16 denarii.
235/40	<i>S. E. G.</i> , VII, 420, Dura.	Παιδικόν: 13 denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Παιδικόν: 3 (or 13) denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Damaged παιδικόν: 2¾ denarii.
235/40	<i>S. E. G.</i> , VII, 420, Dura.	Πάλλιον: 90 denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Two σονδάρια: 6 and 3¾ denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Στιχάριον: 10 denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Two τολάρια: 14 and 25 denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Φακιάλιον: 12 denarii.
235/40	<i>S. E. G.</i> , VII, 417, Dura.	Χλανίδιον: 3 denarii.

## Miscellanea

A. D. early III cent.	<i>Bab. Shabb.</i> 129b, Babylonia.	100 leeches: 1 denarius.
III cent.	<i>Bab. Nedar.</i> 38a, Palestine.	Lease of a ship: up to 4,000 aurei.
early III cent.	M. 28 (ined.); 144 + 115 (ined.), Dura.	One (?) carta: 1-2 asses.

I/II cent.	<i>M. Meila</i> VI 3, Palestine. Several lamps and wicks: 1 peruta.
235/40	<i>S. E. G.</i> , VII, 389, Dura. <i>Μυράφιν ἰδρία</i> : 100 imp. denarii.
late III cent.	<i>Bab. Gitt.</i> 35a finis, Palestine. Parts of the Holy Bible and a mat: c. 500 denarii.
early IV cent.	<i>Bab. Baba Quamma</i> 115a, Babylonia. 1 book: 80-100 denarii.
51	<i>C. I. S.</i> , II, 3, I nr. 3923, Palmyra. 1 golden libation bowl and 1 golden incense bowl: 150 imp. denarii.
51	<i>C. I. S.</i> , II, 3, I nr. 3923, Palmyra. 4 golden paterae: 120 imp. denarii.
II/III cent.	<i>Bab. Kidd.</i> 31a, Palestine. Jewels (estimate): 600,000 denarii.
III cent.	<i>Bab. Kidd.</i> 31a, Palestine. The same jewels (new estimate): 800,000 denarii.
III cent.	<i>Bab. Baba Quamma</i> 113b, Babylonia. A bronze vessel: 4-5 denarii.

## CHAPTER III

### INDUSTRY AND COMMERCE

#### i. Handicrafts

According to Pliny (*N. H.*, XXXVI, 191), the art of glass-blowing was probably invented on the Phoenician coast in the first century B. C. In any case, in the region near Akko sand was found which proved especially suitable for glass-making and provided an unique opportunity for the craftsmen of the neighbouring town of Sidon.<sup>1</sup> Many other places and especially those of the Roman Near East vied with Sidon in the new art during the period of the Principate.<sup>2</sup> The Talmud also has many references to the art of glass-making,<sup>3</sup> which may have been carried by Jews who were compelled to emigrate to parts of the Roman Empire where this art was hitherto unknown.<sup>4</sup> The knowledge of glass-blowing spread very quickly to all Asiatic provinces of Rome as well as to Egypt, and the products of this land soon became as famous as those of Syria (*Economic Survey*, II, 336/7). Later, oriental firms set up workshops in Italy and in the Western provinces of the Roman Empire, thus creating new and independent centres of production.<sup>5</sup> The greatest Syrian glass-maker during the first century A. D. was a certain Ennion of Sidon; glass vessels signed by him have been found in Egypt, Cyprus, Italy, South Russia and elsewhere. It is possible that all these pieces were not produced in Sidon. Ennion also seems to have had a branch workshop near Rome or in his later years to have transferred his whole business to the

<sup>1</sup> Strabo, XVI, C 758 § 35.

<sup>2</sup> D. B. Harden, *Antiquity*, III (1933), 419 f.; *id.*, *Roman Glass from Karanis*, *Univ. Mich. Stud. Hum. Ser.*, XLI (1936), 41 f.; Blümner, *Technologie*, IV, 379 f.; *R.-E.*, Art. Glas, 1383/4; Plin., *N. H.*, V, 75; 76; XXXVI, 193; Tacit., *Hist.*, V, 7; Joseph., *Bell.*, II, 10, 2, 190/1; Athen., XI, 468 C; Lucian, *Amor.*, 26; Eustath. on Dionys. Perieg., 912.

<sup>3</sup> Krauss, II, 285 f.

<sup>4</sup> W. A. Thorpe, *Class. Review*, LI (1937), 45/6.

<sup>5</sup> *R.-E.*, Art., Industrie und Handel, 1465/6, 1471, 1478/9; Sklaverei, *R.-E.*, Supp. VI, 1021; D. B. Harden, *Jour. Rom. Stud.*, XXIV (1934), 50 f.; XXV (1935), 163 f.; *I. G.*, XIV, 2410, 1-4; *C. I. L.*, V, 8118, 2; IX, 6085, 1; X, 8062, 2; XI, 6710, 15; XIII, 10025, 1, 2; XV, 6957 f.



capital.<sup>6</sup> Other glass-makers of Sidon were Artas (who exported chiefly to the Western provinces),<sup>7</sup> Eirenaïos (who lived in the Augustan age),<sup>8</sup> Jason (who seems to have had a branch of his business as far away as in Cologne),<sup>9</sup> Tryphon,<sup>10</sup> Meges or Megas,<sup>11</sup> Ariston,<sup>12</sup> Neikon and Neikias (or Neikaïos).<sup>13</sup> Many glass vessels have also been found at Dura Europos.<sup>14</sup> Originally glass was very expensive; but after a time it became possible to produce it more cheaply, and finally even the poorest were able to afford some types of glass vessels.<sup>15</sup> On the other hand, very fine and artistic products were characteristic of the period of the Principate; these influenced to a great extent the development of the art of glass-making in Byzantium and in the Islamic countries.<sup>16</sup>

The production of parchment and papyrus can certainly be attributed to the Roman Near East,<sup>17</sup> but much more writing material was needed than that region could produce. It is difficult to say whether the papyri and parchments which have been actually found in Mesopotamia and Palestine were manufactured there, and papyrus was probably not

<sup>6</sup> Rostovtzeff, *S. E. H. R. E.*, chapter V note 43; Kisa, *Das Glas*, III, 704 f.; G. A. Eisen, *Glass* (1927); D. B. Harden, *Journ. Rom. Stud.*, XXV (1935), 163 f. *passim*; R. Dussaud, *Syria*, I (1920), 230 f.; X (1929), 82 f.; *R.-E.*, Art. Ennion; *I. G.*, XIV, 2410, 3; *C. I. L.*, XI, 6710, 15; G. Baravalli, *Historia*, VI (1932), 360 f.

<sup>7</sup> Rostovtzeff, *loc. cit.*; Dussaud, *Syria*, I, 231; *R.-E.*, Art. Artas; *I. G.*, XIV, 2410, 1; *C. I. L.*, V, 8118, 2; *C. I. L.*, IX, 6085, 1; *C. I. L.*, X, 8062, 2; *C. I. L.*, XIII, 10025, 1; *C. I. L.*, XV, 6958, 6959; *S. E. G.*, II, 845.

<sup>8</sup> *R.-E.*, Art. Eirenaïos nr. 10; *I. G.*, XIV, 2410, 2.

<sup>9</sup> Rostovtzeff, *loc. cit.*; Harden, *Journ. Rom. Stud.*, 169 f.; Dussaud, *Syria*, I; Dussaud, *Syria*, IV (1923), 179 f.

<sup>10</sup> *R.-E.*, Art. Tryphon.

<sup>11</sup> Harden, *loc. cit.*, 170; *R.-E.*, Art. Sklaverei, 1021.

<sup>12</sup> *I. G.*, XIV, 2410, 6; *C. I. L.*, XV, 6957.

<sup>13</sup> Harden, *loc. cit.*, 170; *I. G.*, XIV, 2410, 4; *C. I. L.*, XIII, 10,025, 2; XV, 6961.

<sup>14</sup> *Dura Rep.* (Cumont), 258 f.; *Dura Rep.*, II, 76 f.; III, 77 f.; IV, 252 f.

<sup>15</sup> Krauss, I, 74/5; II, 285 f., 288 f.

<sup>16</sup> M. P. Charlesworth, *Trade Routes and Commerce in the Roman Empire* (1926), 252; Gallig, *Bibl. Realex.*, Art. Glas; D. B. Harden, *Journ. Rom. Stud.*, XXIV (1934), 50 f.; D. B. Harden, *Roman Glass from Karanis*, *loc. cit.*, XLI (1936), Index VI s. v. Aleppo, Askalon, Barja, Beirut, Hebron, Hira, Jerash, Mount Carmel, Nazareth, Palestine, Palmyra, Phoenicia, Rakka, Sidon, Syria, Tarsus, Tyre, Umrit, Warka; F. O. Waagé in G. W. Elderkin, *Antioch on the Orontes*, I (1934), 75; C. I. Lamm, *Die Ausgrabungen von Samarra*, IV (1928); C. I. Lamm, *Syria*, XII (1931), 385 f.; J. H. Schmidt, *Syria*, XV (1934), 21; D. C. Baramki, *Quart. Dep. Ant. Pal.*, V (1936), 167.

<sup>17</sup> Gallig, *Bibl. Realex.*, Art. Ostrakon, Papyrus, Pergament; H. Ingholt, *Berytus*, I (1934), 33; Krauss, II, 262 f.; III, chapter 11 *passim*; see also chapter I, § 1, note 66. See the *κάρτα* in M. 28 (ined.); 144 + 115 (ined.) from Dura.

used at Dura Europos before the establishment of Roman rule in the Euphrates region. The most important Hellenistic and Parthian writing material was parchment, possibly because the import of papyrus from Egypt across the frontiers was too expensive. It is also worth noting that the newly found papyri from Hafir el 'Auja in the Negeb are of a very late period. Ostraca, wax tablets, linen, bast, olive leaves, nut tree leaves and reeds were used as cheap substitutes for the costly parchment and papyrus.<sup>18</sup> It was even usual at Dura Europos, and perhaps in other districts, to inscribe on the walls of houses accounts of by no means unimportant business transactions.<sup>19</sup> Reed was generally used for writing-pens.<sup>20</sup>

Weavers constituted an especially important social class in Babylonia.<sup>21</sup> Prayers were said and the shofar was blown in that country whenever the prices of linen fell to three-fifths of the normal rate, a symbol of the importance of the trade. Weavers seem to have been of equal repute in non-Jewish Gerasa, where an inscription speaks of the *ἐπὶ τέχνη λινύφων*.<sup>22</sup> Borsippa and Naarda<sup>23</sup> in Babylonia produced large quantities of linen and woollen goods; Nehar-Abba was famous for its durable cloths;<sup>24</sup> Dura Europos seems to have been no small centre of textile production, and exported cloths to the neighbouring regions of Mesopotamia.<sup>25</sup> In Syrian Laodicea,<sup>26</sup> Byblos, Berytus and Tyre<sup>27</sup> the textile industry also found distributing centres; while in Palestine<sup>28</sup> Nawrash produced coarse cloths,<sup>29</sup> Tiberias coarse cloths

<sup>18</sup> Krauss, III, 143 f., 147 f.; Loew, *Flora*, I, 82 f., 93 f., 98; II, 35, IV, 121/2; M. Para VI 4; M. Niduj. VII 4; M. Gitt. II 3; Bab. Zeb. 25b. See chapt. I § II note 31.

<sup>19</sup> *Dura Rep.*, IV, 79 f.

<sup>20</sup> Loew, *Flora*, IV, 121/2.

<sup>21</sup> Joseph., *Ant.*, XIX, 9, 1, 313. See also chapt. I § I note 12.

<sup>22</sup> *S. E. G.*, VII, 827.

<sup>23</sup> Joseph., *Ant.*, XVIII, 9, 1, 314; Plut., *Cato Maior*, IV; Strabo, XVI, C 739 § 7.

<sup>24</sup> *Bab. Shabb.* 140b.

<sup>25</sup> *Dura Rep.*, IV, 96 f. nr. 221; 227; 240 = *S. E. G.*, VII, 385; 417; 419; C. B. Welles, "Dura Papyrus 101" (forthcoming in the *Revue d'Hist. du Droit Orientale*, 1938), note 27.

<sup>26</sup> *R.-E.*, Art. Laodikeia, 715; *Bab. Joma* 69a; A. Rosenzweig, *Kleidung und Schmuck im biblischen und talmudischen Schrifttum* (1905), 21 note 9. See also the following note.

<sup>27</sup> *Tot. Orbis Descr.* in Müller, *Geogr. Graeci*, II, p. 518 § 31; *Ed. Diol.*, chapters 27; 28.

<sup>28</sup> H. F. Lutz, *Textiles* (1923), Index s. v. Galilee, Hebrews, Kidron, Lydda, Southern Palestine; Clemens Alexandr., *Paedag.*, II, 10; M. Baba Quamma X 8; *Bab. Baba Quamma* 118b.

<sup>29</sup> *Bab. Joma* 69a.

and mats;<sup>30</sup> Uscha finer products;<sup>31</sup> and Scythopolis and Beth Mechuza excellent linen.<sup>32</sup> The finishing of imported silk yarn—rough silk and Chinese silk garments being unpleasing to Western taste—was carried on in private shops of Berytus and Tyre as well as those of Palestine long before Justinian's time and probably long before the fourth century A. D.<sup>33</sup> The Talmud and other sources frequently speak of the weaver's craft in Palestine, Syria and Babylonia<sup>34</sup> as well as of connected trades such as the cleaning industry,<sup>35</sup> the manufacturing of fishing nets<sup>36</sup> and the making of the famous embroidery and carpets of Babylonia.<sup>37</sup> Other important trades were tailoring and dressmaking,<sup>38</sup> fulling,<sup>39</sup> and dyeing, especially purple dyeing (the smell of which permeated the whole town of Tyre).<sup>40</sup> In addition large dyeing-works of the Hellenistic time have been excavated at Gezer in Palestine,<sup>41</sup> and Babylonia also had a purple-dyeing trade of importance.<sup>42</sup> Very interesting remains have been found of the cheap linen and woolen goods and of the purple-dyed silk, linen and woolen cloths of the Roman Near East. The dearer textiles usually come from Palmyra; the cheaper ones, from Dura Europos.<sup>43</sup> Basket making and rope manufacturing were important trades in Babylonia.<sup>44</sup>

<sup>30</sup> *Bab. Succa* 20b.

<sup>31</sup> *Bab. Succa* 20b.

<sup>32</sup> *Bab. Ketub.* 67a; *Ed. Diocl.*, chapters 27; 28; *Tot. Orbis Descr.*, loc. cit.; *Cod. Theodosianus*, X, 28, 8. For a βαβυλωνάριος in Caesarea Palaestinae, i. e. a weaver who produced textiles à la mode babylonienne, see *S. E. G.*, VIII, 138a.

<sup>33</sup> *Bab. Baba Quamma* 117b; *Procop.*, *Anecd.*, 25, 14.

<sup>34</sup> Krauss, I, 127 f. *passim*, 149 f.; A. Rosenzweig, *op. cit.*, 18 f., 23 f. and *passim*; Loew, *Flora*, IV, 119; Lutz, loc. cit.; Hamburger, *Talmudisches Reallex.*, Art. Kephara Amika, Kleidung; Gallig, *Bibl. Reallex.*, Art. Baumwolle, Byssus, Kleidung, Leinwand, Weberei, Wolle; H. Seyrig, *Syria*, XVIII (1937), 4 f.; Strabo, XVI, C 746 § 20.

<sup>35</sup> *M. Shabb.* I 7, 8, 9; Loew, *Flora*, IV, 117; Krauss, I, 155 f.; Dalman, IV, 277.

<sup>36</sup> *Bab. M. Katan* 11a.

<sup>37</sup> Plin., *N. H.*, VII, 74; Mart., VIII, 28, 17 f.; *R.-E.*, Art. Babylonien, 2716.

<sup>38</sup> Rosenzweig, 44 f.; Krauss, I, 156 f.

<sup>39</sup> Rosenzweig, 48 f.; Krauss, I, 153 f.; M. N. Tod, *Pal. Expl. Quart.*, LXVII (1935), 85 f.; *S. E. G.*, VIII, 143.

<sup>40</sup> Lucan, III, 217; Strabo, XVI, C 757 § 23; Bouchier, *Syria*, 162 f.; Rosenzweig, 36 f.; Loew, *Flora*, IV, 117 f.; Krauss, I, 137, 143 f.; *Dar.-Saglio*, Art. purpura.

<sup>41</sup> Macalister, *Gezer*, I, 223 f.; Watzinger, *Denkmäler Palästinas*, I, 101; Gallig, *Bibl. Reallex.*, Art. Farbe und Färberei.

<sup>42</sup> Philostr., *Ep.* 54; *Imag.*, I, 27, 4.

<sup>43</sup> R. Pfister, *Textiles de Palmyre* (1934), 61 f. and *passim*; R. Pfister, *Rev. d'Arts Asiatiq.*, VIII (1934), 84; *Dura Rep.*, II, 178 f.; Rostovtzeff, *Yale Class. Stud.*, V (1935), 220/1; *Dura Rep.* (Cumont), 251 f.; M. Th. Schmitter, *Rev. Arch.*, 6th Ser., IX (1937), 219.

<sup>44</sup> Strabo, XVI, C 740 § 9; Gallig, *Bibl. Reallex.*, Art. Netz; Krauss, I, 142 f.; II, 269 f.; Loew, *Flora*, IV, 119.

As we have already seen, the perfumes and drugs produced in the Roman Near East had a world-wide fame.<sup>45</sup> We find in Jerusalem a street named after the ointment-mixers who lived there,<sup>46</sup> and a district of this nature was probably not a unique characteristic of this town.

Hellenistic handicrafts flourished both in the larger and in the smaller towns of the Roman Near East.<sup>47</sup> Lucian, for example, was a member of a family of ἐρμόγλυφοι who had long lived in Samosata.<sup>48</sup> In Jerusalem there were families of craftsmen who handed down from father to son the technique of making and repairing the temple utensils, but owing to the strikes and the excessive demands of such families Alexandrian craftsmen were called in on several occasions.<sup>49</sup> The best workers in bronze of the Roman Near East lived in Sidon at the time of Caligula and Philo; Syria as a whole also had a good name for such work.<sup>50</sup> Numerous inscriptions have been found which represent signatures of stone sculptors;<sup>51</sup> and τέκτονες, λιθοξόοι and λευκουργοί (= marmorarii) are mentioned in inscriptions.<sup>52</sup> We have in addition the names of several architects (architecti, οἰκοδόμοι, δεκανοί, ἀρχιτέκτονες) of Dura Europos and of other Syrian places.<sup>53</sup> There were

<sup>45</sup> See also *R.-E.*, Art. Babylonien, 2714; Gallie, *Bibl. Reale*, Art. Salben; Krauss, I, 233 f., 241 f., 256 f.; Rosenzweig, 93 f.; A. Schmidt, *Drogen und Drogenhandel im Altertum* (1924), chapters I-VII, XI, XVI *passim* and especially 66 f.

<sup>46</sup> *Pal. Joma* 41d; *Bab. Sota* 22a.

<sup>47</sup> Krauss, I, chapter I *passim*; II, 287 f., 295 f.

<sup>48</sup> *R.-E.*, Art. Samosata.

<sup>49</sup> *Bab. Arakhin* 10b; see also below *M. Joma* III 11; *Bab. Joma* 38a (bakers, perfumers and metalworkers).

<sup>50</sup> Philo, *Leg. ad Galum*, p. 31 §§ 220-222 (p. 196, 24 f.).

<sup>51</sup> S. Klein, *Jüdisch-palästinensisches Corpus Inscr.* (1920), nr. 157; R. Dussaud, *Syria*, VI (1925), 269 f.; E. Littmann, "Semitic Inscriptions," *Princeton Exped. to Syria*, IV (1905), 94; M. Dunand, *Le Musée de Soueïda* (1934), nr. 171; 200; St. Witkowski, *Mém. Inst. Franç. d'Arch. Or. du Caire*, LXVII (1937), 185 f.; R. du Mesnil du Buisson, *Rev. Etudes Juives*, C bis (1936), XXV/XXVI nr. 17; *O. I. S.*, II, 1, nr. 166, 201, 208, 209, 210, 212, 213, 217, 219, 220, 221, 229, 230; II, 3, I, nr. 2974; *S. E. G.*, II, 825; VII 113; 155; 972; 1058; 1184; VIII, 22; 93; *O. G. I. S.*, 599; Cagnat, 1009; 1074. For paintings see *Rev. Etudes Juives*, l. c., XXXII nr. 25; *Dura Rep.*, VI, 167 f., 331 f., 379 f., 393 f.; *S. E. G.*, II, 758; VII, 380; for structures of wood see *Dura Rep.*, VI, 240. See also *S. E. G.*, VII, 847; 849; 851; 852; 858; 982 (dedications of sculptures in Gerasa).

<sup>52</sup> Cagnat, 1009; *S. E. G.*, VII, 243.

<sup>53</sup> *Dura Rep.*, VI, 297/8, 300; *S. E. G.*, VII, 156, 230, 1178, 1184, 1203, 1206, 1228; E. Littmann, *op. cit.*, p. 95; Cagnat, 1335; *Année ép.*, 1921, nr. 130; 1933, nr. 180; 1936, nr. 156.

also different regional schools of artists,<sup>54</sup> especially in Palmyra,<sup>55</sup> Baalbek<sup>56</sup> and Dura Europos.<sup>57</sup>

We do not know very much about the whole ceramic industry of the Roman Near East<sup>58</sup> or about the special *terra sigillata* of Syria. We have some knowledge, however, of potters' shops and characteristic products from Mesopotamia,<sup>59</sup> Phoenicia,<sup>60</sup> Syria,<sup>61</sup> Palestine<sup>62</sup> and the Nabataean<sup>63</sup> country. Whole villages in Palestine and in Babylonia

<sup>54</sup> Gallig, *Bibl. Reallez.*, Art. Gewölbe, Haus, Malerei, Mosaik, Palast, Säule, Steinbearbeitung, Tempel; *Dura Rep.* (Cumont), 165 f.; D. Schlumberger, *Syria*, XIV (1933), 283 f.; Watzinger, *Denkmäler Palästinas*, II (1935), 79 f., 102 f.; Krauss, I, chapter 1 *passim*; II, 259 f.; N. Glueck, *Am. Journ. Arch.*, XLI (1937), 361 f.; A. B. W. Kennedy, *Petra* (1925); A. Schenk von Stauffenberg, *Die römische Kaiser Geschichte bei Malalas* (1931), chapter X; F. J. Hollis, *The Archaeology of Herod's Temple* (1934); H. Delehay, *Analecta Rollandiana*, LIII (1935), 225 f.; J. Sauvaget, *Bull. d'Études Orientales*, IV (1935), 81 f. For specialities see Strabo, XVI, C 746 § 20; Theophr., *De Lapid.*, 24; G. Contenau, *Syria*, IV (1923), 269 f. For the pagan temples and for the synagogues of Palestine see M. Avi-Yonah, *Quart. Dep. Ant. Pal.*, V (1936), 143 f. *passim*; S. W. Baron, *Social and Religious History of the Jews* (1937), I, 209 f.; 290 f., III, 51 f., 70 f.; E. T. Sukenik, *Ancient Synagogues of Palestine and Greece* (1934).

<sup>55</sup> *Dura Rep.* (Cumont), 166 f.; A. Gabriel, *Syria*, VII (1926), 71 f.; H. Ingholt, *Syria*, XI (1930), 242 f.; H. Seyrig, *Syria*, XVIII (1937), 4 f., 31 f., 198 f.; H. Ingholt, *Berytus*, II (1935), 57 f.; A. v. Gerkan, *Berytus*, II, 25 f.; D. Schlumberger, *Berytus*, II, 149 f.; Th. Wiegand, *Palmyra*, I, II (1932); H. Seyrig, *Berytus*, III (1936), 137 f.

<sup>56</sup> A. Parrot, *Syria*, IX (1928), 97 f.; X (1929), 103 f.; Th. Wiegand, *Baalbek*, I-III (1921-1925).

<sup>57</sup> *Dura Rep.* (Cumont), chapters I-IV *passim*; *Dura Rep.*, I-VI *passim*; J. H. Breasted, *Syria*, III (1922), 177 f.; Rostovtzeff, *Yale Class. Stud.*, V (1935), 219 f. *passim*; C. Hopkins, *Berytus*, III (1936), 1 f.; A. von Gerkan, *Römische Quartalschrift*, XLII (1934), 219 f.

<sup>58</sup> J. H. Iliffe, *Quart. Depart. Ant. Palest.*, VI (1937), 4 f.

<sup>59</sup> Rostovtzeff, *Yale Class. Stud.*, V (1935), 219; N. C. Debevoise, *Parthian Pottery from Seleucia on the Tigris*, *Univ. Michig. Stud.*, XXXII (1934); *Dura Rep.* (Cumont), 454 f.; *Dura Rep.*, II, 31 f.; III, 72 f.; IV, 223 f.; VI, 109 f., 119, 143 f., 175 f., 184, 209, 414.

<sup>60</sup> D. de Laseur, *Syria*, III (1922), 6 f.

<sup>61</sup> N. C. Debevoise, *Berytus*, II (1935), 1 f.; *Dura Rep.*, II, 31 f.; M. Pézard, *Syria*, III (1922), 102 f.

<sup>62</sup> G. M. FitzGerald, *Pal. Expl. Quart.*, LVII (1925), 189 f.; I. G. Duncan, *Pal. Expl. Quart.*, LVIII (1926), 33 f.; G. M. FitzGerald, *Pal. Expl. Quart.*, LVIII (1926), 84 f.; J. H. Iliffe, *Quart. Depart. Ant. Pal.*, V (1936), 126; Krauss, II, 271 f., 288 f.; P. Abel-A. Barrois, *Syria*, IX (1928), 303 f.; Gallig, *Bibl. Reallez.*, Art. Fayence, Keramik, Lampe; A. Reifenberg, *Journ. Pal. Or. Soc.*, XI (1931), 63 f.

<sup>63</sup> G. M. Crowfoot, *Pal. Expl. Quart.*, LXVIII (1936), 14 f.; J. H. Iliffe, *Quart. Depart. Ant. Pal.*, III (1934), 132 f.; N. Glueck, *Am. Journ. Arch.*, XLI (1937), 366, 376, 466 f.

consisted almost solely of potters,<sup>64</sup> and Gerasa had a potters' guild as well.<sup>65</sup>

The remains of work in precious metals found in the Roman Near East have only begun to be investigated, but there seems to be a marked difference between the styles of Palmyra and Mesopotamia and those of the Western districts.<sup>66</sup> The influence of Antioch<sup>67</sup> on Byzantine workmanship in gold and silver is quite apparent. It would be instructive to relate the excavated remains with the descriptions given in ancient authorities and especially in numerous passages of the Talmud.<sup>68</sup> This process could be applied also to the many objects in iron, bronze, lead and wood recovered during the extensive excavations in the Roman Near East<sup>69</sup> and to the Talmudic descriptions<sup>70</sup> referring to joinery, carpentry and objects of iron, bronze and lead. A guild of goldsmiths and silversmiths existed in Palmyra;<sup>71</sup> the Aramaic dedication of a Nabataean *faber aerarius* has been found at Puteoli;<sup>72</sup> and we also have inscriptions of a χαλκουργός from Berytus<sup>73</sup> and of Sidonian μαχαίροποιοί.<sup>74</sup> The χαλκεία of Jerusalem were situated together in a special market place.<sup>75</sup> A μαγγανάριος,<sup>76</sup> i. e. perhaps a manufacturer and merchant of military machines, was to be found near Bostra in 274 A. D. Later, Diocletian established large imperial armament factories in Antioch, Damascus and Edessa<sup>77</sup> which must have had some connection with such private firms of the earlier centuries. Many

<sup>64</sup> Hamburger, *Realenz. für Bibel und Talmud*, Art. Kephars Chanan; Krauss, II, 271 f., 288 f.

<sup>65</sup> *S. E. G.*, VII, 879.

<sup>66</sup> *Dura Rep.*, II, 78 f.; IV, 229 f., 254 f.; V, 307 f.; Rostovtzeff, *Yale Class. Stud.*, V (1935), 219, 223.

<sup>67</sup> Ch. Diehl, *Syria*, II (1921), 81 f.; XI (1930), 289 f.

<sup>68</sup> Krauss, I, 198 f.; II, 307 f.; Rosenzweig, *Kleidung*, 105 f.

<sup>69</sup> Rostovtzeff, *Yale Class. Stud.*, V (1935), 221 f.; *Dura Rep.* (Cumont), 256 f., 260 f.; *Dura Rep.*, II, 72 f.; III, 78 f., IV, 232 f., 246 f., VI, 81 f., 109 f., 119, 143 f., 175 f., 184, 439 f.; Galling, *Bibl. Reallew.*, Art. Metallbearbeitung; R. Dussaud, *Syria*, V (1924), 212 f.; B. Carrière—A. Barrois, *Syria*, VIII (1927), 207 f.; E. von Merklin, *Berytus*, III (1936), 51 f.; *Arch. Anz.*, LI (1936), 252 f.; M. Avi-Yonah, *Quart. Depart. Antiq. Pal.*, IV (1935), 87 f., 138 f.

<sup>70</sup> Krauss, I, 58 f., 268 f., 309 f., 310 f.; II, 254 f., 266 f., 299 f.; Loew, *Mon. Gesch. Wiss. Jud.*, LXXXI (1937), 3 f. See also notes 49 and 50.

<sup>71</sup> *O. I. S.*, II, 3, I, nr. 3945 = Cagnat, 1031.

<sup>72</sup> *O. I. S.*, II, 1, nr. 158.

<sup>74</sup> *Rev. Arch.*, II (1899), 48.

<sup>73</sup> Cagnat, 1079 = *O. G. I. S.*, 590.

<sup>75</sup> Joseph., *Bell.*, V, 8, 1, 331.

<sup>76</sup> Cagnat, 1165. The meaning of the word is very uncertain. See F. Cumont, *L'Égypte des astrologues* (1937), 85 note 3.

<sup>77</sup> Malal., XII, 307, 20 f.; *Notit. Dign. Or.*, XI, 18-23.

interesting arms have been found at Dura, and others are known from the stone sculptures at Palmyra.<sup>78</sup>

The excavators of Dura Europos have found very interesting and characteristic leather shields,<sup>79</sup> remains of shoes and of other leather articles. The types of these articles, which were à la mode in Palmyra, are well known from numerous stone sculptures.<sup>80</sup> The New Testament and the Talmud also contain many useful observations on the manufacture of leather and especially of shoes<sup>81</sup> as well as on the connected craft of tannery.<sup>82</sup>

The preparation of food was usually a part of domestic economy in Roman times.<sup>83</sup> We find, however, here and there especially in large towns professional bakers<sup>84</sup> and butchers.<sup>85</sup>

M. Joma III 10/11 and Bab. Joma 38a: (Mishna): "Miracles had befallen the gates of Nicanor and his memory was kept in honour. But (the memory of) these (was kept) in dishonour: They of the house of Garmu would not teach (any other) how to prepare the shewbread. They of the house of Abtinias would not teach (any other) how to prepare the incense. Hygros ben Levi had a special art in singing, but he would not teach it (to any other). Ben Kamtzar would not teach (any other) in (his special) craft of writing.

(Gemara): "... Nicanor travelled to Alexandria to fetch his gates. On the return journey . . . the vessel was in danger of sinking. So they took one of the gates and threw it into the sea, but the sea did not cease to rage. When they wanted to throw the other one in too he stood up and clung to it, saying: 'Throw me with it (into the sea).' Immediately the sea ceased raging, but he was grieved at the loss of the first one. When they arrived at the port of Acco, (the gate) rose up (from the sea) and came out from under the hull of the ship. . . . Artisans (summoned) from Alexandria were just as able to bake as the members of the house of Garmu . . . ; but their loaves became mouldy after a short time. . . . The

<sup>78</sup> H. Seyrig, *Syria*, XVIII (1937), 4 f.; *Dura Rep.* (Cumont), 260 f.; *Dura Rep.*, II, 72 f.; VI, 439 f. *passim*.

<sup>79</sup> *Dura Pg.* 9; *Dura Rep.* (Cumont), 253 f.; *Dura Rep.*, II, 74 f., 217; VI, 456 f.

<sup>80</sup> H. Seyrig, *loc. cit.*

<sup>81</sup> Krauss, I, 175 f.; II, 264 f.; Galling, *Bibl. Realex.*, Art. Leder, Schuh; Rosenzweig, 68 f.; *Acta Apost.*, XIII, 51.

<sup>82</sup> M. *Shabb.* I 7; 8; 9; Krauss, II, 259 f.; Rosenzweig, 68 f.; *Acta Apost.*, IX, 43; X, 6, 32.

<sup>83</sup> Krauss, I, chapters 2 and 4; II, 244 f.; III, 26 f. *passim*, 148 f.; Dalman, III, 207 f. *passim*; IV, 100 f., 142 and *passim*; Bab. *Nidda* 6b.

<sup>84</sup> Dalman, IV, 1 f. *passim*; Krauss, I, 92 f., 95 f.; Newman, 149 f.; Galling, *Bibl. Realex.*, Art. Backen und Backofen.

<sup>85</sup> Newman, 150 f.; Krauss, I, 108 f.; II, 359 f.

sages called in (the members of the house of Garmu), but they refused to come. When, however, their wages were doubled, they consented to come. Formerly they had received 1,200 denarii per day, and from now on 2,400 denarii. Rabbi (reign of Commodus and Septimius Severus) says, that formerly they received 2,400 denarii and from now on 4,800 denarii. . . . Artisans (summoned) from Alexandria were just as able to make incense (as the members of the house of Abtinias), but not to let the smoke rise in the same manner. . . . The sages called in (the members of the house of Abtinias), but they refused to come. When, however, their wages were doubled, they consented to come. Formerly, they had received 1,200 denarii per day, and from now on 2,400 denarii. Rabbi says, that formerly they received 2,400 denarii and from now on 4,800 denarii."

According to the Talmud the loaves of professional bakers could easily be distinguished from home-made bread. Generally the bakers did not make use of their own materials; the flour for the bread and the fuel to bake it were supplied by their customers. Meat was sold near the slaughterhouses.<sup>86</sup> The brewing trade was highly profitable, especially in Babylonia.<sup>87</sup> Moreover, the Hellenistic invention of the watermill had generally made the art of milling a professional occupation.<sup>88</sup>

Craftsmanship was highly respected among the Jews<sup>89</sup> with the exception of work that soiled the hands, such as pottery and dyeing, or was morally open to suspicion like the crafts of the goldsmith, tanner, silk weaver, tailor, fuller and hair-dresser.<sup>90</sup> It is not surprising, then, that many of the most famous Talmud authorities and of the early leaders of the Christian church were craftsmen.<sup>91</sup> Craftsmanship and agriculture were not always separated,<sup>92</sup> and the craftsman or tradesman as a rule sold his own and sometimes other people's goods in his shop or by peddling.<sup>93</sup> *Ergasteria*<sup>94</sup> of slaves were found even in

<sup>86</sup> *Bab. Kiddush*. 70a; Krauss, I, 109 f.; II, 365 f.

<sup>87</sup> *Bab. Pesach*. 113a; Loew, *Flora*, IV, 108 f.; Newman, 107 f.

<sup>88</sup> *Dura Rep.* (Cumont), 255 f.; Newman, 144 f.; Galling, *Bibl. Reallew.*, Art. Mühle; Dalman, III, 207 f. and especially 230 f.; *Bab. Ketub.* 59b; *Bab. Shabb.* 18a; *Bab. Pesach.* 11a; M. Avi-Yonah, *Quart. Dep. Ant. Pal.*, V (1936), 150, 157, 161, 165, 172, 175.

<sup>89</sup> Krauss, II, 250 f., 253.

<sup>90</sup> Cagnat, 1077; for hair-dresser see also Krauss, I, 196 f.; for a charcoal-burner see *Bab. Berakh.* 28a.

<sup>91</sup> Krauss, II, 254; A. Büchler, *Jews' Coll. Publ.*, IV (1912), 50; A. Harnack, *Mission und Ausbreitung des Christentums*, 4th ed., 200, 313 f., 559 f.

<sup>92</sup> Newman, Index, s. v. R. Hisda.

<sup>93</sup> Krauss, I, 241 f., 301, 362 f.

<sup>94</sup> *S. E. G.*, VII, 1099; 1105; *Année épigr.*, 1933, nr. 166; Cagnat, 1056 = *O. G. I. S.*, 629, 77, 80 = *O. I. S.*, II, 3, I, nr. 3913.



Transjordanian, and slaves or freedmen were very often professional craftsmen.<sup>95</sup> The Talmud considers handicrafts very profitable and secure occupations even in times of stress and famine, and we have no reason to doubt this statement.<sup>96</sup> Streets and even whole villages were sometimes inhabited by members of the same craft.<sup>97</sup> Very many crafts were hereditary and traditional to such an extent that the children very seldom forsook the occupation of their parents; the Talmud speaks in this connection of doctors, midwives, perfumers, carpenters, fullers and metal workers in artistic products.<sup>98</sup>

*Bab. Arakh.* 10b: "A bronze cymbal belonged to the temple (of Jerusalem), and it had a very harmonious sound; as it was on one occasion damaged, the sages sent to Alexandria for craftsmen to come (and repair it). . . . A bronze mortar belonged to the temple; as it was on one occasion damaged, the sages sent to Alexandria for craftsmen to come (and repair it)."

The Talmud also gives abundant information on regulations which must have appeared in the usual contracts of apprenticeship made in Palestine and in Babylonia:<sup>99</sup> we learn especially of the conditions of apprenticeship in the trades of surgeons, tanners, scribes, cooks, confectioners, carpet weavers, smiths and carpenters. It was carefully stipulated what the apprentice had to learn and in what length of time; this might extend to ten years.

## ii. Commerce

The most important trade routes of the ancient world passed through the Roman Near East.<sup>1</sup> Antioch on the Orontes and its port Seleucia in Pieria connected Syria with all the trading posts along the coast of the Mediterranean from Asia Minor and Egypt to Spain and Morocco. A chain of famous seaports from Gaza, Ascalon, Jaffa, Akko, Anthedon and Caesarea in Palestine to Tyre, Sidon, Berytus, Byblos, Tripolis

<sup>95</sup> Krauss, I, 196 f., 225; II, 86 f., 90, 92, 102 f., 624; *R.-E.*, Art. Sklaverei, 1021/2; Lucian, *Parasit.*, I; *Philopseud.*, 11.

<sup>96</sup> *Bab. Sanh.* 29a: "Raba (Dioctetian, Babylonia) remarked . . . : 'Though a famine last seven years, it does not pass the artisan's gate.'" See also Krauss, II, 250 f.

<sup>97</sup> Krauss, II, 254 f., 301; Joseph., *Bell.*, V, 8, 1, 331.

<sup>98</sup> Krauss, II, 254 f.

<sup>99</sup> Krauss, II, 90, 255/6.

<sup>1</sup> M. P. Charlesworth, *Trade Routes and Commerce of the Roman Empire* (1926), chapter III

and Laodicea made a similar connection in the west.<sup>2</sup> Caravan routes which led to the South of Arabia began at Gerasa, Petra, Gabala, Rabbat-Ammon and Damascus.<sup>3</sup> The trade routes through the Persian Gulf to India as well as to the Gerrhaeans in the East of Arabia began at Alexandria Charax in Mesene at the mouth of the Tigris; this port was also called Charax Hyspaosinu during the period of the Principate after a small independent ruler. It was there that the Emperor Trajan saw large ships going to India and recalled the glory of Alexander. Not only ancient authors but also Greek and Aramaic inscriptions from Palmyra mention this important seaport, the terminus of many caravan routes from the Mediterranean Sea, Armenia and Asia Minor.<sup>4</sup> Another important trade route started from the Mediterranean ports of Syria and Palestine; went through Damascus, Palmyra or Bostra to Phorathus, Choumana, Vologaesias, Seleuceia on the Tigris, Babylon and Ktesiphon; and then through Iran to India and China.<sup>5</sup>

Cagnat, *I. G. R. R.*, III, 1052 = *O. G. I. S.*, 632 = *C. I. S.*, II, 3, I, nr. 3916. Palmyra.

"In honour of Neses, son of Alas son of Neses son of Alas son of Rhephelus.

In honour of Neses, son of Alas son of Neses son of Alas son of Rhephelus son of Abisseas, the leader of the society of caravan merchants, the merchants who made the journey with him from Phorathus and Vologaesias (to Palmyra), in honour of and in gratitude to him. In the year 453, in the month Xandicus (April, 142 A. D.)."

<sup>2</sup> Strabo, XVI, C 753 § 12; 759 § 28; § 30; 803 § 21; Krauss, II, 344; *Acta Apost.*, XXI, 1-3; Tacit., *Ann.*, II, 55; *Bab. Berakh.* 36a; *Bab. Aboda Zara* 16a; Joseph., *Bell.*, IV, 11, 5, 659 f.; *Ant.*, XV, 8, 7, 200; XVI, 2, 5, 62; XVIII, 6, 3, 155/8; M. Avi-Yonah, *Quart. Dep. Ant. Pal.*, V (1936), 144 (Akko), 150 (Caesarea), 152 (Dora), 154 (Jamnia), 156 (Joppe, Ascalon), 157 (Gaza), 165 (Azot).

<sup>3</sup> Strabo, XVI, C 756 § 20; C 779 § 21; Plin., *N. H.*, XII, 40, 80, 124; M. Rostovtzeff, *S. E. H. R. E.*, chapter III note 14; V note 20; M. Rostovtzeff, *Caravan Cities* (1932), *passim*; M. Rostovtzeff, *Rev. Hist.*, CLXXV (1935), 33 f.; *R. E.*, Art. *Λευκή κώμη* nr. 3, Petra.

<sup>4</sup> Strabo, XVI, C 766 — 775; Diod., III, 42; Plin., *N. H.*, VI, 140 f.; Dio Cass., LXVIII, 283 f.; Eutrop., VIII, 3; *Année épigr.*, 1931, nr. 54; *S. E. G.*, VII, 142; J. Cantineau, *Rev. Assyr.*, XXVII (1930), p. 8, nr. 7; p. 25 nr. 34; *C. I. S.*, II, 3, I, nr. 3948 = Cagnat, 1050; *O. G. I. S.*, 633 = Cagnat, 1053; R. Mousterde — A. Poidebard, *Syria*, XII (1931), 101 f.; *R. E.*, Art. *Alexandreia* nr. 13, *Antiocheia* nr. 10, *Charax* nr. 10, *Gerrhaioi*, *Hyspaosines*, *Margaritae*, *Mesene*, 1093, *Spasinu Charax*. For the caravan route Palestine-Mesene see M. *Baba Mezia* IV 7; M. *Baba Bathra* III 1.

<sup>5</sup> *C. I. S.*, II, 3, I, nr. 3917 = *O. G. I. S.*, 641; *C. I. S.*, nr. 3949 = *O. G. I. S.*, 638 = Cagnat, 1051; *C. I. S.*, nr. 3960; J. Cantineau, *Syria*, XII (1931), 404; M. P. Charlesworth, *Five Men* (1936), 158 f.

Finally, a trade route went through Edessa, Samosata and Nisibis to Armenia, Asia Minor, the Black Sea and the Caspian Sea.<sup>6</sup> Of all the countries of the western ancient world, only Babylonia (and Syria?) were known in China, and it was only in these countries that merchants had knowledge of China.<sup>7</sup> Maes Titianus,<sup>8</sup> a Syrian merchant of the second century A. D., found out important facts about the trade route through Central Asia to China. Even the trade route through the Red Sea to India (= Scythia) was regularly used by a very remarkable guild of Palmyrenian merchants who were able to maintain their stand against the merchants of Alexandria.<sup>9</sup> The usual Mediterranean trade route from Syria went by way of Cyprus to the coast of Asia Minor and from there to Italy.<sup>10</sup> The *ναύκληροι* of the much-used sea route from Syria to Egypt were often regular employees of wealthy men, who found this enterprise very profitable.<sup>11</sup>

Among the products which were transported from the Mediterranean countries through Syria to the East we hear of Roman metal goods exported to Persia,<sup>12</sup> of western minerals and articles of craftsmanship, of slaves, corals, textiles, wines, styrax, sweet clover, copper, tin, lead, and of bronze-, silver- and glass vessels which were especially exported to India and even to Siam.<sup>13</sup> On the other hand, the West

<sup>6</sup> *Cambridge Ancient Hist.*, XI, 98; *Tot. Orb. Terr. Descr.* in Müller, *Geogr. Graeco. Min.*, II, p. 516 § 22.

<sup>7</sup> Charlesworth, chapter VI; *Cambr. Anc. Hist.*, XI, 120 f.; A. Herrmann, *Die alten Seidenstrassen zwischen China und Syrien*, I (1910); A. Herrmann, *Loulan* (1931); O. Franke, *Geschichte des chinesischen Reiches*, I (1930), 334, 337 f., 339, 344 f., 347, 349 f., 396 f., 405 f.; T. Torrance, *West China Border Research Soc. Journ.*, IV (1931), 88 f.; G. F. Hudson, *Europe and China* (1931), chapters II and III; L. Friedländer, *Sittengeschichte Roms* (10th ed.), I, 391 f., 488 f., II, 324 f.; C. G. Seligman, in *Antiquity*, XI (1937), 5 f.; H. Maspero, *Mém. Inst. Arch. Or. Caïre*, LXVII (1937), 377 f.

<sup>8</sup> *R.-E.*, Art. Maes (Suppl. VI).

<sup>9</sup> *Boon. Survey*, II, 344 note 11 and 384, nr. 235 = *Année épigr.*, 1912, nr. 171; *S. E. G.*, VII, 156; *C. I. S.*, II, 3, I, nr. 3910; H. Seyrig, *Annuaire de l'Institut de Philol.*, IV (1936), 397 f.; M. Rostovtzeff, *S. E. H. R. E.*, chapter V note 18.

<sup>10</sup> Tacit., *Ann.*, II, 56; *Acta Apost.*, XIII, 4 f.; XVIII, 18 f.; XXI, 1 f.; XXVII, 1 f.; Joseph., *Ant.*, XV, 6, 7, 200; XVI, 2, 5, 62; XVIII, 6, 3, 155/8; *Vita*, 3, 13-16.

<sup>11</sup> *Pap. Bad.* 85a I 10.

<sup>12</sup> Herodian, IV, 10, 4.

<sup>13</sup> E. H. Warmington, *The Commerce Between the Roman Empire and India* (1928), part II *passim*. For a Roman bronze lamp of II/III (not I) century A. D. type imported via Syria or Egypt and found at Pong Tuk (Siam!), see *Bull. Ecol. Franç. d'Extrême Orient.*, XXVII (1927), 499 f. and pl. 49; *Annual Bibl. of Indian Arch.* (Kern Inst., Leyden), 1920, 19 and pl. VIII; *Orient. Lit. Zeit.*, XXXVIII (1935), 572 f.; M. P. Charlesworth, *Five Men* (1936), 157. For export to China see Seligman, *loc. cit.*, 15 f.

accepted the textiles,<sup>14</sup> the carpets and the embroideries<sup>15</sup> of Babylonia and Iran and the furs and hides<sup>16</sup> of Mesopotamia, Iran, India, Central and East Asia. Pottery and carved ivory work from Persian Mesopotamia were sometimes exported to Olbia and Alexandria.<sup>17</sup> China exported valuable silk cloths;<sup>18</sup> Arabia, Iran and India numerous perfumes and drugs.<sup>19</sup> Palmyra especially was an important centre for the trade in Eastern textiles, perfumes and drugs.<sup>20</sup> Tigers and other wild beasts were brought from India and Central Asia to Rome.<sup>21</sup> India exported so many valuable products to the West that we cannot give a complete list in this survey and venture to refer to an excellent monograph<sup>22</sup> on the subject. Syria was such an important transit centre for the West that a permanent colony of Roman *negotiatores* was established in Antioch as early as Caesar's time.<sup>23</sup>

Syria imported many products, especially cheap ones for the needs of its own population. *Terra sigillata* and other pottery came from Italy, Greece and Asia Minor principally during the first century A. D.,<sup>24</sup> and the "Hadrianic" potsherds mentioned in the Talmud probably came from Hadrianoi in Mysia.<sup>25</sup> Very popular cheap imported goods were dried fish and similar products chiefly from Egypt and Spain; Akko was a centre for that trade.<sup>26</sup> The Spanish cod and the Spanish mackerel as well as the Egyptian hampers of dried fish are especially mentioned by Talmud and Mishna.<sup>27</sup> More rarely

<sup>14</sup> Plin., *N. H.*, VIII, 74; Aristid., *Eis 'Páμyn* (26 K, 14 D) § 12.

<sup>15</sup> Plin., *N. H.*, VII, 56; Herod., III, 47; Martial, VIII, 28, 17; Arrian, *Anab.*, VI, 29, 5; *Ed. Dioocl.*, 10, 8; Paus., II, 11.

<sup>16</sup> *R.-E.*, Art. Pellis; *Dig.*, XXXIX, 4, 16, 7.

<sup>17</sup> *Dura Rep.* (Cumont), 463 f.; *R.-E.*, Art. Olbia 2419/20.

<sup>18</sup> *R.-E.*, Art. Serica; M. P. Charlesworth, *op. cit.*, 262; G. M. A. Richter, *Am. Journ. Arch.*, XXX (1929), 27 f.; *Arch. Jahrb.*, XLVIII (1933), 742; Seligman, *loc. cit.*, 13 f.

<sup>19</sup> Galling, *Bibl. Reallew.*, Art. Harze; A. Schmidt, *Drogen und Drogenhandel im Altertum* (1924), 27 f., 63 f. See also note 22.

<sup>20</sup> Herodian, X, 10, 4.

<sup>21</sup> Plin., *N. H.*, VIII, 25; *Dig.*, XXXIX, 4, 16 § 7; S. H. A., *Aurelian*, V.

<sup>22</sup> Warmington, *loc. cit.*; for East Arabia see *R.-E.*, Art. Perlmutter; S. Schiffer, "La perle dans l'antiquité," *Rev. Phil.*, 3rd Ser., XI (1937), 45 f.

<sup>23</sup> Caesar, *Bell. Civ.*, III, 102.

<sup>24</sup> H. Comfort—F. O. Waagé, *Pal. Expl. Quart.*, LXVIII (1936), 221 f.; *Antioch on the Orontes*, I (1934), 72; G. Contenau, *Syria*, I (1920), 290 f.; J. H. Iliffe, *Quart. Depart. Ant. Pal.*, VI (1937), 4 f.

<sup>25</sup> Krauss, II, 283.

<sup>26</sup> *Bab. Aboda Zara* 34b.

<sup>27</sup> *Bab. Aboda Zara* 39a; *M. Shabb.* XXII 2; *M. Maas.* VI 3.

vegetables<sup>28</sup> and Bithynian cheese were imported into Syria.<sup>29</sup> Palmyra and Mesopotamia imported wine for their own population from the Syrian coast and probably also from other Roman provinces.<sup>30</sup>

*Syria*, VII (1926), 128 f.      October, 243 A. D.      Palmyra.

(Aramaic): "In the month of October in the year 555 (243 A. D.) on the occasion of the symposarchy of Jarhai Agrippa (son of) Jarhai (son of) Jedibel (son of) Ogga (son of) Jaout, who served the gods and presided over the services the whole year and who gave old wine to the priests the whole year from his house and has not imported from the west any wine in skins. Let also be remembered and blessed Pertinax and Malkosa, his sons, and Ogilon, the scribe, and Zabbai, son of Soada, who was the head-chef of the kitchen, and Jerahbola, the cup-bearer, and all the servants."

The Talmud mentions wine which was imported from Italy, Cilicia, Cyprus (?) and even Ethiopia.<sup>31</sup> Various foodstuffs and especially corn were imported from Cyprus to Palestine, particularly in times of famine;<sup>32</sup> sometimes we also hear of Egyptian corn.<sup>33</sup> Babylonia needed to import corn in times of stress.<sup>34</sup> Cheap cloth was also imported,<sup>35</sup> and the Talmud speaks of caravans and ships bringing to Syria and Palestine cloth, gold, silver, jewels, glass, valuable woods, pearls, corn, oil, wine, figs, meat, fish and dried fish.<sup>36</sup> Italian textiles were not considered very durable.<sup>37</sup> The upper classes of Syria and Palestine also took some of the valuable products of the transport trade for themselves: we hear of negro slaves imported from Egypt,<sup>38</sup> of horses imported from Spain for races in Antioch,<sup>39</sup> of Mediterranean

<sup>28</sup> *Pal. Sebitth* VI 43, 7a 4.

<sup>29</sup> *M. Aboda Zara* II 4.

<sup>30</sup> See also F. Cumont, *Syria*, VIII (1927), 49 f.; *Dura Rep.*, IV, 123.

<sup>31</sup> *Pal. Aboda Zara* I 40a 64; *Pal. Halla* IV 60b 35; *Bab. Erub.* 64b; *Pal. Shabb.* 18, 1, 16c 18; *Bab. Baba Bathra* 97b; *Pal. Joma* IV 5, 41.

<sup>32</sup> *Pal. Dem.*, II 1; *R.-E.*, Art. Helena von Adiabene; A. Reifenberg, *Pal. Or. Soc. Journ.*, XII (1932), 209 f.

<sup>33</sup> *Joseph.*, *Ant.*, XV, 9, 2, 307/8; XX, 5, 2, 101; *Eoon. Surv.*, II, 346.

<sup>34</sup> *Bab. Taanit* 24b; *Bab. Ketuba* 97a.

<sup>35</sup> *Bab. Shabb.* 99b.

<sup>36</sup> Krauss, II, 333, 343, 676 note 151. For Egyptian glass in Syria D. B. Harden, *Roman Glass from Karanis*, *Univ. Mich. Stud. Hum. Ser.*, XLI (1936), 176. For import of earth see *M. Halla* II 1, 2; IV 10, 11.

<sup>37</sup> *Bab. Baba Mezia* 29b finis. For import of Italian wool into Syria see also *C. I. S.*, II, 3, I, nr. 3913.

<sup>38</sup> Krauss, II, 86.

<sup>39</sup> *Symm.*, *Ep.*, IV, 62 (late Roman period).

corals and Arabian pearls,<sup>40</sup> valuable Corinthian metal lamps,<sup>41</sup> Pelusian and even Indian cloths,<sup>42</sup> and Chinese silks, remains of which have been found in the excavations.<sup>43</sup> Manuscripts of the Scriptures were frequently imported into Palestine, and the Talmud expressly forbade their export.<sup>44</sup> Even parts of buildings were sometimes imported as, for example, pillars for the temple of Zeus at Heliopolis and bronze doors for the temple of Jerusalem.<sup>45</sup>

*Anth. Pal.*, XIV, 74: "An oracle which was given in Heliopolis when the pillars for the temple of Zeus in that town were lost in a shipwreck. The pillars are now in Berytus.

Say to Poseidon: 'It is right to obey elder brothers. Thou art not right to take pleasure in the pillars of my house of wide fame.' Speak three times: 'Move the shining salt flood of the sea,' and he will obey. But if he does not, he had better save himself, as I will burn the whole sea; for even the sea does not extinguish the lightning of Zeus."

Syrian goods and products were exported in exchange for imports to many countries, and the textiles and glasses of the Roman Near East seem to have been imported even into China, Central Asia and India.<sup>46</sup> A papyrus from Egypt in the first century A. D. mentions a white Syrian *στόλη* and a Syrian *ιμάτιον*,<sup>47</sup> while Syrian styrax was well known in Iran.<sup>48</sup> Tyre and Laodicea exported sandals (to Palestine);<sup>49</sup> Babylonia, jewels, embroidered cloths, carpets and valuable animals like peacocks;<sup>50</sup> and Commagene, excellent geese.<sup>51</sup> We have

<sup>40</sup> Krauss, I, 200, 659/60; *R.-E.*, Art. Perlmutter; Matth., XIII, 45; S. Schiffer, *loc. cit.*

<sup>41</sup> Joseph., *Vita*, 13, 68.

<sup>42</sup> *Bab. Gitt.* 59a; *M. Joma* III 6/7; *Pal. Sanh.* II 6, 20c 73. See also chapt. II § VII.

<sup>43</sup> Rosenzweig, *op. cit.*, 33 f.; *Bab. Pesach.* 57b; Pfister, *Textiles de Palmyre*, *passim*; M. Rostovtzeff, *Yale Class. Stud.*, V (1935), 220/1; M. Th. Schmitter, *Rev. Arch.*, 6th Ser., IX (1937), 219.

<sup>44</sup> *Pal. Sanh.* III 10, 21d 28.

<sup>45</sup> *Bab. Joma* 38a (see § I); *O. G. I. S.*, 599 = *S. E. G.*, VIII, 200.

<sup>46</sup> M. Rostovtzeff, *Yale Class. Stud.*, V (1935), 220 f.; Ebert, *Reallex. d. Vorgesch.*, Art. Noin Ulla; H. Lüders, *Textilien im alten Turkestan*, *Abh. Preuss. Ak. Phil. Hist. Klass.* (1936), nr. 3; C. G. Seligman, *Antiquity*, XI (1937), 15 f.; P. Grinznov—E. A. Golomshtok, *Am. Journ. Arch.*, XXXVII (1933), 30 f.; *Duremb.-Saglio*, Art. purpura, vitrum. See § I notes 5-13 and 42; Martial, II, 29. For Syrian glass in Egypt and in South Russia see D. B. Harden, *Roman Glass from Karanis*, 269; *S. E. G.*, VII, 811.

<sup>47</sup> *B. G. U.*, VII, 1666.

<sup>48</sup> Plin., *N. H.*, XII, 40.

<sup>49</sup> *Pal. Aboda Zara* I 4, 39d 15; *M. Kelim* XXVI 1.

<sup>50</sup> *R.-E.*, Art. Babylonia, 2715/6.

<sup>51</sup> Plin., *N. H.*, X, 28.

also mentioned the exportation of Syrian fruit, especially of the famous plums from Damascus. Syrian figs were well known in Italy,<sup>52</sup> and Babylonia exported figs and other fruit.<sup>53</sup> The wines from Gaza, Sarepta and Ascalon were exported to Gaul even in Byzantine and Merovingian times.<sup>54</sup> The wine of Laodicea was a popular import to Egypt, East Africa and even India. Syrian olive oil was already known in Rome at the time of Catullus.<sup>55</sup> With regard to olive oil, the needs of Syria itself as far up as Laodicea could be satisfied by the regions of Galilee, Tyre, the Decapolis, Jerusalem and a few other districts.<sup>56</sup> Syrian wheat was exported to Italy and even to Egypt in times of shortage.<sup>57</sup> Date syrup from Jericho also seems to have been an export product.<sup>58</sup> Babylonian and Palestinian asphalt was used in all neighbouring regions.<sup>59</sup> Phoenicia exported hides and furs.<sup>60</sup> The export of Syrian drugs has already been mentioned earlier. There was also an extensive slave trade from Syria: more slaves were exported from here than were received in exchange from other countries.<sup>61</sup> For instance, we find many Syrian, Sidonian and Jewish slaves in Egypt and a very large number of Jewish slaves in Rome.<sup>62</sup> In addition we hear of the transference of population by means of emigration: we find people of all classes and nations of Syria, Palestine, Transjordan and Mesopotamia in countries as far away as Britain to the west and as Central Asia, India and even China to the east.<sup>63</sup>

<sup>52</sup> See chapter I § I note 85; S. H. A., *Elag.*, 21; Plin., *N. H.*, XIII, 5; XV, 15; Juven., VII, 14 f.

<sup>53</sup> See *Bab. Baba Bathra* 22a and chapt. I § I.

<sup>54</sup> Apoll. Sid., XVII, 15 (ed. Mohr); Venant. Fort., *Vita S. Mart.*, II, 81/2; Greg. Turon., *Hist. Franc.*, VII, 29; *In Gloria Conf.* 64; Pap. Ox., 1924. See also chapter I § I notes 124 and 125.

<sup>55</sup> *R. E.*, Art. Oelbaum, Oleum; Catull., VI, 8.

<sup>56</sup> *Bab. Menach.* 85b; Joseph., *Bell.*, I, 21, 11, 424; II, 21, 2, 591/2; Joseph., *Vita*, 13, 74/5.

<sup>57</sup> Cicero, *Leg. Agr.*, II, 80; Pap. London II p. 96; 97; 98.

<sup>58</sup> Joseph., *Bell.*, IV, 8, 3, 468.

<sup>59</sup> Plin., *N. H.*, XXXV, 178; Strabo, XVI, C 764 § 45.

<sup>60</sup> *Ed. Diocl.*, 8, 4.

<sup>61</sup> *R. E.*, Suppl. VI, Art. Sklaverei, 1003/5; Bouchier, 173; Krauss, II, 85 f. For the export of Syrian drugs see chapt. I § I note 65.

<sup>62</sup> *B. G. U.*, III, 816; Dessau, *I. L. S.*, 1980, 2193, 3944, 8193; *R. E.*, Art. Sklaverei.

<sup>63</sup> See *C. I. S.*, II, I, p. 100 f. *passim*, 183 f.; II, 3, I, p. 11 f. *passim*; Cagnat, *I. G. R. E.*, I, 25; 26; *O. G. I. S.*, 594, 595, 596; Dessau, *I. L. S.*, 300, 1836, 2855, 4288, 4297-4300, 4304, 4334, 4598, 6337, 7063, 7207, 7259, 7273, 7528, 7592; Charlesworth, *op. cit.*, 54 f., 252/3, 275, 280; Bouchier, 174 f.; Dessau, *Geschichte der römischen Kaiserzeit*, II, 2, 719 f.; G. Vaggi, *Aegyptus*, XVII (1937), 27 f.; M. Rostovtzeff,

On the other hand, foreigners, especially Roman veterans and colonists, frequently settled in Syria; and distinguished foreigners often paid visits as students, scholars or tourists to the places of interest, the universities and the religious institutions of Syria.<sup>64</sup> Our authorities mention various categories of merchants: we find, for instance, the old Hellenistic groups of the *ναύκληροι* and the *ἐμποροι*, who not only operated on the sea as in the time before Alexander but were also caravan merchants.<sup>65</sup> In addition a new type of merchant appears,<sup>66</sup> the *πραγματευτής*, who is the equivalent of the Latin *negotiator* and is characteristic of the time of the Principate. He combines the foreign business of *ἐμπορος* and *ναύκληρος* with important undertakings in home trade. One of these men was Firmus of Alexandria, perhaps of Syrian descent, who actually headed a revolution.<sup>67</sup>

Nebuchelos of Dura who had several agents in neighbouring towns may also have been a *πραγματευτής*; for in addition to home trade and money lending he imported wine to Dura and exported bread from that place to Soura, textiles of Dura wool to the neighbouring town of Appadana and wine to the neighbouring Banabel region by way of Dura.<sup>68</sup>

We hear a great deal about home trade, agents and markets from the Talmud and from Greek and Aramaic inscriptions.<sup>69</sup> Everywhere

*S. E. H. R. E.*, chapter VI note 78 and pl. 22; S. W. Baron, *Social and Religious History of the Jews* (1937), I, 280 f., III, 68; *Econ. Survey*, III, 486 note 83; P. Lambrechts, *L'Antiquité Classique*, VI (1937), 35 f.; *Forsch. und Fortschr.*, XIII (1937), 275.

<sup>64</sup> See *R.-E.*, Art. *Itinerarien* (2323, 2332 f., 2352 f.); Strabo, XVI *passim*; Philostr., *Apoll.*, *passim*; Joseph., *Ant.*, I, 3, 5, 92; I, 11, 4, 203; XX, 2, 3, 25; *Bell.*, IV, 9, 7, 531 f.; Seneca, *Ep.*, 104, 15; S. W. Baron, *op. cit.*, 243; *M. Hagiga* I, 1; *M. Halla* IV 10, 11; *M. Bikkur*. III; see also chapt. II § IV and chapt. IV § IV.

<sup>65</sup> See notes 9, 11, and § III notes 5-8; M. Rostovtzeff, *Mélanges Glotz*, II (1932), 793 f.; Krauss, *Tal. Arch.*, II, 351 f.; S. Krauss, *Lehnwörter*, II (1898), 348; Matth., XIII, 45 f.

<sup>66</sup> Cagnat, 1145; Krauss, *Tal. Arch.*, II, 352; Krauss, *Lehnwörter*, II, 478.

<sup>67</sup> *R.-E.*, Art. *Firmus*; Bouchier, 149.

<sup>68</sup> *Dura Rep.*, IV, 79 f. *passim*.

<sup>69</sup> I. Herzog, *Main Institutions of Jewish Law*, I (1936), Index s. v. *sale*; Krauss, *Tal. Arch.*, II, 349 f., 361 f., 367 f., 372 f.; A. Büchler, *Der gal. Amhaarez* (1906), 237 f.; H. Klein, *Jewish Quart. Rev.*, N. S., XXIII (1932/3), 211 f.; XXVIII (1938), 189 f.; *Bab. Baba Bathra* 89a; 91a; *Pal. Baba Bathra* V finis; *S. E. G.*, II, 842; VII, 760; 880; *Dura Rep.*, V, 21 nr. 388; *Année ép.*, 1927, nr. 148; Cagnat, 1013, 1045, 1224, 1375; *O. I. S.*, II, 3, I, nr. 3932 = *O. G. I. S.*, 640 = Cagnat, 1033. See also a "dominus mercedis" mentioned in an Aramaic inscription from Palmyra, *O. I. S.*, II, 3, I, nr. 4218 and two weights: *S. E. G.*, VII, 806; 809. A *κυμῶς* is mentioned in



*agoranomoi* not only controlled weights and measures but from about the third century A. D. prices also. Nevertheless, the forcing up of prices was a common feature of tradesmen at the time—a sin against which the Talmud and the Christian Fathers protested in the strongest terms.<sup>70</sup> The market place of Dura with its shops has recently been excavated.<sup>71</sup> The more wealthy traders usually owned shops,<sup>72</sup> but temples and public baths were also popular meeting places for the transaction of business.<sup>73</sup> Very often traders in the same product lived together,<sup>74</sup> e. g. Jerusalem had a special quarter for wool traders.<sup>75</sup> The more firmly established traders kept account books of the well-known Roman type.<sup>76</sup>

*S. E. G.*, VII, 381:

	Dura.
"Item: I, Nebuchelus, have received.....	denarii 2,120
Item: Baba has sent through Bimel, son of Adagabarus .....	denarii 202
Through Bathes, son of Chilineus.....	denarii 850
Through Barnabas, son of Semeas.....	denarii 100 "

*S. E. G.*, VII, 382:

	Dura.
"Item: I, Nebuchelus, have received.....	denarii 2,120
I gave to Phraates.....	denarii 1,150
Another (payment) .....	denarii 616
Item: I have sent to Baba through Bimel.....	denarii 202
Through Bathes.....	denarii 850
Maribelos received.....	denarii 152 "

The old Hellenic and Hellenistic profession of the *μετάβολος* (the re-

*S. E. G.*, VIII, 143, an inscription from Joppe. For the markets of Ascalon, Ptolemais, Gaza, Nicopolis and Terebinthus see M. Avi-Yonah, *Quart. Decp. Ant. Pal.*, V (1936), 144, 155, 156, 157, 166. For the Jewish law of agency see I. H. Levinthal, *Jewish Quart. Review*, N. S., XIII (1922/3), 117 f.; Herzog, *op. cit.*, Index s. v. agent, agency.

<sup>70</sup> Krauss, II, 309; G. Mickwitz, *Geld und Wirtschaft im römischen Reiche des IV. Jahrh. n. Chr.*, *Soc. Scient. Fenn. Comment. Hum. Litt.*, IV, 2 (1932), 158/9. See also Julian., *Misop.*, 368 C, 369; Liban., *Orat.* XVIII, 195; Ammian. Marc., XXII, 14, 1 f.

<sup>71</sup> *Dura Rep.*, V, 73 f.

<sup>72</sup> Krauss, II, 361 f.; Mutth., XXI, 12 f. = Mark, XI, 15/6 = Luke, XIX, 45 f. = John, II, 14 f.; M. Kerethot I 7.

<sup>73</sup> Krauss, I, 220 f.

<sup>74</sup> Krauss, II, 361 f.

<sup>75</sup> Joseph., *Bell.*, V, 8, 1, 331; M. Hrub. X 9. For an *ἀμφόδος σεντική* in Scythopolis see *S. E. G.*, VIII, 43.

<sup>76</sup> S. Krauss, *Lehnwörter*, II, 466.

tailer) is mentioned,<sup>77</sup> and traders not infrequently specialized in one product, although *παντοπωλεία* occur.<sup>78</sup> The goods especially connected with the home trade were bread, meat, cheese, oil, vegetables, honey, wax, honey cakes, wine, drinking water and firewood, cattle, birds, hides, fruit, cummin, caraway, women's hair, wool, textiles, salt, perfumes, drugs, glass, fish (both fresh and dry), books, slaves, metal objects, various kinds of pottery, jewels, and landed property, especially vineyards, fields and houses.<sup>79</sup>

*S. E. G.*, VII, 408:

Dura.

"Fleeces: 2; fleeces: 3; fleece: 1; fleeces: 18; fleeces: 3; fleece: 1 (1); fleeces: 2 (1); fleeces: 10; fleeces: 2; fleece: 1; fleece: 1; fleeces: 3; fleeces: 4; fleece: 1."

*S. E. G.*, VII, 416:

Dura.

"Self: denarii 40; for barley: denarius 1; I gave to Mannus: denarii 4; for meat (?): denarii 4; for oil: denarii 11; for wine: denarii 4."

M 28 (ined.):

Dura Mithraeum.

"Firewood: . . . ; meat: . . . ; oil: . . . ; wood: . . . denarii 2; little radishes: asses (?) . . . ; *carta*: asses (?) 2; lighting oil: asses (?) 5."

M 56:

Dura Mithraeum.

"Water: asses (?) 15; coal: asses (?) 15; lighting oil: . . . ; wine: . . . ; vegetables: . . ."

An indication of the difference between wholesale and retail prices is given by the passages in the Talmud which forbid the retailer to make a profit of more than one-sixth of the wholesale price.<sup>80</sup>

<sup>77</sup> *O. G. I. S.*, 629, 83. See J. Hasebroek, *Staat und Handel im alten Griechenland* (1928), 2; M. I. Finkelstein, in *Class. Philol.*, XXX (1935), 325, 333; H. Knorringer, *Emporos* (1926), 117 f.; *R.-E.*, Art. Monopole, 167.

<sup>78</sup> F. Rosenthal, *Mitt. Vorderas.-Ägypt. Ges.*, XLI, 1 (1936), 9; *O. G. I. S.*, 629, 78.

<sup>79</sup> Newman, 143, 150, 156/7; Dalman, IV, 280, 407 f., 416; F. Goldmann, *Monatsschr. Gesch. Wiss. Jud.*, LI (1907), 34 f.; Krauss, I, 134, 195, 241 f.; II, 85 f., 259 f., 349 f. *passim*, III, 172, 179 f.; M. Mainzer, *Monatsschr. Gesch. Wiss. Jud.*, LIII (1909), 551, 554, 557; M. N. Tod, *Pal. Expl. Quart.*, LXVII (1935), 85 f.; Liban., *Orat.*, XI, 254 f.; LI, 8/9; *Bab. Aboda Zara* 13a; *Bab. Baba Bathra* 91a; *S. E. G.*, VII, 386-437 *passim*; *G. I. S.*, II, 3, I, nr. 3913 = *O. G. I. S.*, 629 = Cagnat, 1056; Matth. XIV, 15 = Mark, VI, 37 = Luke, IX, 13 = John, VI, 6; John, II, 14 f.; Matth., XIII, 44; XXI, 12 f., Mark, XI, 15/6; Luke, XIX, 45 f.; John, II, 14 f. For firewood and drinking water see the *incdita* from Dura: M 28; 143; 144 + 115.

<sup>80</sup> See with the Talmudic passages A. Büchler, *The Economic Conditions of the Jews after the Destruction of the Second Temple*, *Jews' College Publ.*, IV (1912), 19/20; I. Obermeyer, "Die Landschaft Babylonien im Zeitalter des Talmuds und des Gaonats," *Schriften Ges. Förd. Wiss. Jud.*, XXX (1920), 256.

M. *Baba Mezia* IV 3: "Fraud is constituted by (an overcharge of) four silver (maas) in twenty-four, which is a tetradrachmon, (hence) a sixth of the purchase. Until what time is one permitted to revoke (the sale)? Until he can show (the article) to a merchant or to a relative. R. Tarfon (Nero to Hadrian) ruled in Lydda that fraud is constituted by eight silver (maas) in twenty-four, which is a tetradrachmon, (hence) a third of the purchase; whereat the Lyddan merchants rejoiced. 'But,' said he to them, 'one may retract the whole day.' 'Then let R. Tarfon leave us in statu quo,' they requested; and so they reverted to the ruling of the sages."

### iii. *Guilds and Transportation*

We find many trade guilds in the Roman Near East.<sup>1</sup> Our authorities mention craftsmen like the *machairopoi* from Sidon, the *linyphoi* and the *kerameis* from Gerasa and the gold and silversmiths from Palmyra. According to the Talmud, weavers, dyers and tailors had their own trade-marks on their cloths.<sup>2</sup> Gerasa had a guild of traders — *ἀγοραῖοι* as well as a branch of the famous actors' guild of Dionysos.<sup>3</sup> The guilds of the foreign merchants were as a rule composed of importers from the same home town. Berytus,<sup>4</sup> Tyre<sup>5</sup> and Heliopolis<sup>6</sup> had such merchant guilds in Puteoli. An organization of Syrian or Palmyrenian merchants seems to have existed in Dacia,<sup>7</sup> and the foreign merchants in Arados were united under a *πρόβουλος*.<sup>8</sup>

Cagnat, *I. G. R. E.*, III, 1019:

Arados.

"In honour of Ariston, son of Asclepiades, the priest of Augustus Caesar and president of the society of ship-owners by Lucius, his son."

Ἀ Σύρων κοινὸν of Malaca in Hispania and its *πάτρων καὶ προστάτης* are mentioned in an inscription.<sup>9</sup> The importance, however, of foreign merchant guilds and clubs of caravan traders in Palmyra was unique and has been frequently and fully discussed by historians in the last few years.<sup>10</sup>

<sup>1</sup> *R.-E.*, Art. *Berufsvereine* (Suppl. IV, 158, 163-166, 171).

<sup>2</sup> *Bab. Shabb.* 11a, b; *Pal. Shabb.* 3b; *Bab. Pesach.* 42a; *Pal. Peah* 16a; *Bab. Kelim* 29b; M. *Baba Mezia* XI 24; *Pal. Erub.* 101a. For a synagogue of certain craftsmen see *Bab. Nazir.* 52a. See also § I notes 22, 65, 71 and 74.

<sup>3</sup> *S. M. G.*, VII, 825; 880.

<sup>4</sup> *O. G. I. S.*, 594; 595.

<sup>5</sup> Dessau, *I. L. S.*, 300.

<sup>6</sup> Dessau, *I. L. S.*, 4291.

<sup>7</sup> M. Rostovtzeff, *S. E. H. R. E.*, chapter VI note 78.

<sup>8</sup> Cagnat, III, 1019.

<sup>9</sup> Cagnat, I, 26.

<sup>10</sup> *Année ép.*, 1931, nr. 54; Cagnat, 1031; 1045; 1050-1053; *O. G. I. S.*, 632; 633; 638; 641; 646; *S. M. G.*, VII, 135; 139; 142; *O. I. L.*, III, 4485; 4486; 4489; 4490;

We are frequently told of transport by sea to and from the Roman Near East.<sup>11</sup> A captain from Rhosos on the northwest corner of Syria rendered Augustus valuable service and received Roman citizenship. Many seagoing ships seem to have been in Jewish hands. A Roman battle fleet, the *Classis Syriaca Augusta*,<sup>12</sup> was stationed by the Syrian coast, most probably in Seleuceia on the Orontes; sometimes it was strengthened by vessels from other parts of the Mediterranean. Ships were also used on the lake of Tiberias,<sup>13</sup> on the Jordan, on the Lycos,<sup>14</sup> on the Orontes near Antioch<sup>15</sup> and especially on the Euphrates and Tigris.<sup>16</sup> A drawing of an Euphrates boat has been excavated in Dura Europos.

The roads of the Roman Near East were of more importance than the water-ways for transport purposes. Their construction and improvement in Roman times have been to a large extent made clear by archaeological research.<sup>17</sup> Caravans travelled along them during the day, and at night the merchants retired to special inns (some of which have been excavated) or to fortified camps built for the purpose.<sup>18</sup> It was possible to insure ships and beasts of burden against destruction.<sup>19</sup>

*C. I. S.*, II, 3, I, nr. 3916, 3924, 3933, 3936, 3942, 3948, 3949, 3960, 3963; M. Rostovtzeff, *Mélanges Glotz*, II (1932), 793 f.; M. Rostovtzeff, *Berytus*, II (1935), 143 f.

<sup>11</sup> Krauss, II, 338 f., 343 f.; Galling, *Bibl. Reallex.*, Art. Schiff; M. Arakh IV 3; *Bab. Joma* 35b; *Pal. Taan.* 3, 69b 48; S. Tolkowsky, *Pal. Expl. Quart.*, LX (1928), 153 f.; P. Roussel, *Syria*, XV (1934), 33 f.; F. Cumont, *L'Antiquité Classique*, IV (1935), 191 f.; see also § II notes 2, 4, 9, 10, 11, 36, 45.

<sup>12</sup> *R.-E.*, Art. Classis, 2842/3; Bouchier, 35 f.; Paul M. Meyer, *Jurist. Pap.*, nr. 37; *P. S. I.*, 1026.

<sup>13</sup> Joseph., *Bell.*, II, 21, 8, 635.

<sup>14</sup> *Bab. Chag.* 23a; *Bab. Jebam.* 116b; *Bab. Shabb.* 60b; Joseph., *Bell.*, IV, 7, 6, 439; Strabo, XVI, C 755 § 16; Krauss, II, 339.

<sup>15</sup> Liban., *Orat.* XI, 27 f., 260 f.

<sup>16</sup> *Bab. Bekhor.* 55b; *Bab. Gitt.* 73a; Krauss, II, 343 f.; Galling, *Bibl. Reallex.*, Art. Schiff; *Dura Rep.* V, pl. 31, 1.

<sup>17</sup> *R.-E.*, Art. Babylonien, 716; Mesopotamien, 1117 f.; Seleukeia, Syria, 1645 f.; Galling, *Bibl. Reallex.*, Art. Handel und Verkehr, Strasse; M. P. Charlesworth, *op. cit.*, 38 f.; Krauss, II, 317 f., 323 f.; 328 f.; A. Poidebard, *La trace de Rome dans le désert de Syrie* (1932), *passim*; W. Hüttel, *Antoninus Pius*, I (1937), 335; Strabo, XVI, C 747/8 § 27; 756 § 20; 759 § 30; 803 § 21; *Année épigr.*, 1930, nr. 141; M. Avi-Yonah, *Quart. Dep. Ant. Pal.*, V (1936), 150, 159, 160-163, 169, 170, 174 and especially 178 f.; A. Alt, *Zeitschr. Deutsch. Pal. Ver.*, LX (1937), 240 f.

<sup>18</sup> *M. Erub.* I 8; Krauss, II, 320, 334 f.; *Princeton Exped.*, III, 46; M. Rostovtzeff, *S. E. H. R. E.*, chapter V note 33; M. Rostovtzeff, *Comptes Rendus* (1935), 285 f. and *Journ. Hell. Stud.*, LV (1935), 66.

<sup>19</sup> See also M. Baba Quamma X 4.

*Bab. Baba Quamma* 116b: "The donkey drivers may come to a mutual agreement that if any of them loses his donkey, he shall be provided with another. . . . The ship-owners may agree that if any of them loses his ship, he shall be provided with another."

We do not know very much of the costs of transport in the Roman Near East. A donkey driver in the Palestine of the first or second century A. D. charged 1 denarius for 10 Persian parasangs (= c. 63,000 m.).<sup>20</sup> Lodging for the night in an inn seems, according to Luke, X, 34/5, to have cost 2 denarii. A journey from the interior of Palestine to Caesarea on the coast apparently cost from 100 to 200 denarii at an unknown date, and to Beth-Ilanim (near Hebron?) from 10,000 to 20,000 denarii.<sup>21</sup> The journey of a complete caravan from Hyspaosinu Charax to Palmyra cost in 192/3 A. D. more than 300 aurei, much less than the above-mentioned sum.

Cagnat, *I. G. R. R.*, III, 1050 = *C. I. S.*, II, 3, I, nr. 3948. Palmyra.

"This statue was erected in honour of Thaimarsas, son of Thaimas son of Mokimus son of Garbas, the leader of the society of caravan merchants, by the men who made the journey with him from Spasinou Charax (to Palmyra) in recognition of his paying 300 old gold denarii for expenses and of his kindness to them, and in honour of him and of his sons, Jaddaius and Jaddibolus. In the year 504, Xandicus (April, 193 A. D.)."

We give a list of some journeys commonly undertaken at the time with their length:<sup>22</sup>

Berytus-Brundisium and back, *Dig.*, XLV, 1, 122 § 1: 200 days.

Puteoli-Tyre, *O. G. I. S.*, 595: less than 137 days.

Jericho-Petra, Strabo, XVI, C 779 § 21: 3-4 days.

Jerusalem-Edessa, *S. Silviae Aq. Peregr.*, 47: 25 days.

Antioch-Babylon, Joh. Chrys., *Ad. Stag.*, II, 6: 70 days.

Antioch-Beroea, Procop., *Bell. Pers.*, II, 7, 2: 2 days.

Antioch-Seleucia in Picria, Strabo, XVI, C 751 § 7: less than 1 day.

Jerusalem-Alexandria, Sulpic., *Dial.*, 1, 8, 1: 15-16 days.

<sup>20</sup> *Bab. Chagiga* 9b: "Bar He-He remarked to Hillel (c. 30 B. C.-30 A. D.): 'Go and learn this in the donkey drivers' street: (A journey of) ten parasangs costs one denarius, while eleven parasangs cost two denarii.'"

<sup>21</sup> *Sifre Deut.* 32, 2; Midrash *Tannaim Deut.* 32, 2 (ed. Hoffmann), p. 184/5. The tradition is most probably later than Diocletian, and it is difficult to give an estimate of the value of the denarii mentioned by the authorities. See *Encyclopaedia Judaica*, Art. Bet. Elonim; M. Avi-Yonah, *Quart. Dep. Ant. Pal.*, V (1936), 167.

<sup>22</sup> Charlesworth, *op. cit.*, 24, 43/4, 250-1; Krauss, II, 320 f.

Carthage-Tripolis. Migne, *Patrol. Graec.*, XCVIII, 565: 20 days.

Tripolis-Sicily, Migne, *Patrol. Graec.*, XCVIII, 579: 14 days.

Palestine-Babylonia, M. *Taan.* I 3; M. *Rh.* I 3 f.; *Bab. Taan.* 4b; 24b: 14 days and more.

Palestine-Mesene, M. *Baba Mezia* IV 7; M. *Baba Bathra* III 1: return of caravans after as much as one year's stay.

The average day's journey, *Pal. Berakh.* I 1, 2c 32: 10 Persian parasangs — c. 63 km.

#### iv. Syrian Currency

The coinage of the Roman Near East is a matter of great interest; for apart from Egypt, nowhere else in the Roman Empire can the alterations in imperial, provincial and local coinage be traced with such accuracy up to the Byzantine period. Throughout the years before Actium there were only the mints (and these were numerous) belonging to autonomous towns and principalities which coined copper and silver both for local and for inter-state use.<sup>1</sup> A certain amount of Roman aurei and denarii also found their way into the East.<sup>2</sup> Towards the end of the first ten years after Actium Augustus found it necessary to set up in Antioch on the Orontes, in addition to the local mints already existing, an official provincial mint.<sup>3</sup> Its currency consisted partly of silver in tetradrachma and coins of lesser denomination, which gradually superseded the local silver issues and were even more frequently used in the first and second centuries A. D. than denarii. The Syrian drachma weighed a little less than the denarius and it was more debased in the later periods. The ancient authors dealing with metrology<sup>4</sup> inform us that a Syrian tetradrachmon was equal to three imperial denarii, a valuation which accords well with a reference in the Talmud.<sup>5</sup>

Pollux, 9, 86: "The value of the Syrian talent was 4,500 Attic drachmae."

<sup>1</sup> B. M. C., *Galatia-Syria*; *Palestine, Phoenicia*; *Arabia*; *Mesopotamia*; C. I. S., II, 1, p. 226.

<sup>2</sup> R.-E., Art. Labienus, 259.

<sup>3</sup> B. M. C., *Galatia-Syria*; W. Wruck, *Die syrische Provinzialprägung von Augustus bis Trajan* (1931), 12 f.; A. Dieudonné, *Rev. Numism.*, 4. Ser., XXX (1927), 1 f., 155 f.; XXXII (1929), 15 f., 131 f.

<sup>4</sup> F. Hultsch, *Griechische und römische Metrologie* (1882), 595; B. M. C., *Galatia* etc. p. lxii/iii; Mommsen, *Römisches Münzwesen*, 37 f., 715 f.; Segrè, *Metrologia*, 399.

<sup>5</sup> *Bab. Bekhorot* 50b: 1 aureus (= 25 denarii) = 8 tetradrachma (= 32 drachmae). See also note 46.

*Metrol. Script.*, I, p. 300, 15: "The Attic *talent* was worth . . . a third more than that of Antioch, and it was equal to that of Tyre."

In addition to the silver, copper coins were minted approximately according to the standard of the imperial copper; but whereas the imperial denarius was divided into 16 asses, early traditions of the Talmud<sup>6</sup> inform us that the Syrian denarius, i. e. the provincial drachma ( $= \frac{3}{4}$  imperial denarius), was usually divided into 24 asses. In Cappadocia also there was in use a provincial silver coin corresponding to  $\frac{3}{4}$  denarius; here the Roman government divided it into 12 Italian asses and so adjusted it to imperial copper standards.<sup>7</sup> In Syria, however, as we see from the Talmud, the government coined provincial dupondii equal in value to one imperial or one Cappadocian as; and so there was a very convenient correspondence between the copper issues of the Empire, Asia Minor and Syria. We have proof at least for the second century that coins of each of the three groups were used in the Roman Near East (see notes 17, 36 and 37).

At first the Roman government founded only one provincial mint, that at Antioch, but after Augustus had appointed procurators for the greater part of the Herodian kingdom in Palestine the Roman government minted copper here also. As we learn from the Gospels and from some inscriptions and coins the quadrans (a rare coin in Italy) and the so-called *λεπτόν* ( $= \frac{1}{2}$  quadrans) were coined in Palestine as well as in Syria.<sup>8</sup> The Roman imperial coins and those of local mintage were used as before in those parts where the provincial currency was not popular, especially in Palestine and in the regions west of the Euphrates. The Roman denarius is frequently mentioned in the Gospels,<sup>9</sup> as well as in inscriptions from Palmyra in 51 A. D.<sup>10</sup> and from Dura in the first century A. D.

<sup>6</sup> *Bab. Kiddush*. 12a; *Pal. Kiddush*. 1, 58d, 30, 40; *Bab. Bekhor*. 50a. See below notes 28 and 46 and the translation of *Bab. Baba Mezia*, 44 b.

<sup>7</sup> von Schroetter, *Wörterbuch der Münzkunde*, Art. Assarion.

<sup>8</sup> *Matth.*, V, 26; *Luke*, XII, 59; *XXI*, 2; *Mark*, XII, 42; *R.-E.*, Art. Kodrantes, Leptos; Schroetter, *op. cit.*, Art. Lepton, Quadrans; F. W. Madden, *Coins of the Jews* (1881), chapter VII; *Jewish Encyclopaedia*, Art. Numismatics. See also K. Galling, *Bibl. Reallex.*, Art. Münze.

<sup>9</sup> *Matth.*, XVIII, 28; 20, 29 f., 13; 22, 19; *Mark*, VI, 37; 12, 5; 14, 5; *Luke*, VII, 41; 10, 35; 20, 24; *John*, VI, 7; 12, 5; *Apokal.*, VI, 6.

<sup>10</sup> *C. I. S.*, II, 3, 1, nr. 3923.

*Comptes Rendus* (1937), 203/4.<sup>11</sup>

Dura Europos.

(Aramaic) "Good memory for Malkion, son of Sameisai, born in this town (?), who has given a hundred denarii from this work for Shamash the god to gain good fortune for ever."

(Greek) "Malchion, son of Somesus, has given a hundred denarii for the expenses of the god because he has saved him."

The provincial tetradrachmon occurs only in Matth., XVII, 27. A Talmudic tradition of the first century A. D. speaks of the victoriatus.<sup>12</sup> Dating from c. 62/3 A. D. a new group of Syrian provincial silver coins is found which, as their types show, must have originated in Tyre or in Antioch for the special use of Tyre and its environs. This issue must have preceded the final creation of a second provincial mint in Tyre at the beginning of Vespasian's reign.<sup>13</sup> In support of this conclusion we may note that the ἀργύριον Τύριον is mentioned as a popular coin of Palestine and Transjordan dating from the later years of Nero's reign.<sup>14</sup> Nevertheless, the imperial coinage did not become obsolete in the years after Nero, as the Neronian stater is mentioned by a Trajanic tradition of the Mishna<sup>15</sup> and the denarius in a property declaration from the time of Domitian.<sup>16</sup> On the other hand, we may gather from Philostratus (*Apoll.*, VI, 39) that the provincial silver drachma was especially popular in Antioch during the same period.

The imperial aureus and denarius were in circulation in Syria from the reign of Nerva to that of Marcus Aurelius as they had been during

<sup>11</sup> Blanchet's (*ibid.*) interpretation of \* in this inscription as a symbol of the "Cappadocian" denarius is both improbable from the epigraphical point of view and not in conformity with the evidence of the Gospels and of *O. I. S.*, II, 3, I, nr. 3923.

<sup>12</sup> *M. Ketub.* V 7; *Bab. Ketub.* 64a; *Bab. Gittin* 45b; *Bab. Joma* 35b.

<sup>13</sup> Wruck, *Die syrische Provinzialprägung von Augustus bis Trajan*, 5, 182/3; *B. M. C.*, *Phoenicia*; Dieudonné, *loc. cit.*

<sup>14</sup> Joseph., *Bell.*, II, 21, 2, 592 (66/7 A. D.); Cagnat, 1335 and *Bull. Amer. School Or. Res.*, XLV (1932), 6 f. (69 A. D., Gerasa); the incomplete date of a second inscription from Gerasa (*Revue Bibl.* [1909], 451), which also mentions Tyrian silver and seems to be comparatively early, could be changed from δ[ι]ρ to δ[α]ρ. But the earliest possible dates from the numismatic point of view are δ[κ]ρ or δ[λ]ρ, i. e. 61/2 A. D. or 71/2 A. D. R. O. Fink (*Journ. Rom. Stud.*, XXIII [1933], 114/5) and A. R. Bellinger (*Dura Report*, III, 147/8) have wrongly criticized C. T. Seltman (*Yale Class. Stud.*, II [1931], 60) in the present writer's opinion, if they hold that the expressions ἀργύριον Τύριον, Τύριον νόμισμα etc. denote only the Tyrian coin standard.

<sup>15</sup> *M. Kelim* XVII 12 = *Bab. Bekhoroth* 38a; *Bab. Baba Mezia* 25b.

<sup>16</sup> Euseb., *Hist. Eccl.*, III, 20. See chapt. I § III.



the first century A. D.<sup>17</sup> From the time of Trajan to the death of Marcus Aurelius or thereabouts and, as it appears, in this period alone, the use of the provincial Tyrian drachma spread beyond the bounds of the Eastern frontier; this is the testimony of parchments from Parthian Dura Europos and of a coin hoard from Mesopotamia.<sup>18</sup>

Dura Pg. 32.

August, 134 A. D.

Dura Europos.

"On the 14th of Hyperberetaeus of the (Seleucid) year 445, in the village Ossa, before the witnesses who sign below. Aththaeus, son of Acarabanus and grandson of Zabidlaus, an inhabitant of the village, has admitted that he has on loan from Lysias, son of Abbuthis, an inhabitant of Europos, one hundred drachmae of good silver of the Tyrian standard, on the security of all his property which remains in his possession; and instead of the interest on the loan, Aththaeus will continue to deliver to Lysias annually twelve and a half jars of wine fresh from the press from the present time until the money is repaid.

I, Aththaeus son of Acarabanus, consent to all that has been written above.

I, Ariabazus son of Ariabazus, bear witness.

I, Abidginaeus son of Rhagoaeus, bear witness.

I, Barsamisus son of Rhageadadus, bear witness."

In Talmudic traditions of the second and third centuries there are mentioned, as we should expect, the golden aureus, silver coins (denarius, quinarius, provincial drachma, maa), the follis and copper coins (tressis, dupondius, as, semis, quadrans, teruncius, hordeus, bes(?), enneas,

<sup>17</sup> E. g., for Palmyra *O. I. S.*, II, 3, I, nr. 3913 = *O. G. I. S.*, 629 = Cagnat, 1056 (137 A. D.); *O. I. S.*, loc. cit., 4215 (c. 150 A. D.); Th. Wiegand, *Palmyra* (1932), 11/2 = Cantineau, *Rev. Bibl.* (1930), 548 nr. 14 (171 A. D.). For other districts see Cagnat, 1318 (138/9 A. D., near Bostra); for Syrian and Mesopotamian hoards and finds containing imperial and provincial coins of the second and third centuries A. D. see *Dura Rep.* (Cumont), 278 f., 480 f.; *Dura Rep.*, III, 139 f.; IV, 259 f.; V, 304 f.; VI, 467 f.; A. H. McDowell, *Coins from Seleucia*, *Univ. of Mich. Stud. Hum. Ser.*, XXXVII (1935), 232; *Antioch*, I (1934), 80 f.; *Coins of the Roman Empire in the British Museum*, III (1936), p. xxix (Rum Kalaat); A. R. Bellinger, *Two Roman Hoards from Dura Europos* (1931); A. R. Bellinger, *The Third and Fourth Dura Hoards* (1932); E. T. Newell, *The Fifth Dura Hoard* (1932); S. P. Noe, *A Bibliography of Greek Coin Hoards* (second edition, 1937), s. v. Antioch, Beirut, Dura-Europos, Elentheropolis, Hama, Jafa, Nineveh, Sana, Syria, Tyre.

<sup>18</sup> S. P. Noe, *op. cit.*, s. v. Nineveh; *Dura Pg.* 10 (120/21 A. D.); 23 (180 A. D.); M. Rostovtzeff, *S. E. H. R. E.*, chapter V note 46. The number of provincial mints increased slowly, but to a remarkable extent. At least Antioch, Arados, Ascalon, Beroea, Emesa, Gaza, Heliopolis, Sidon, Tripolis and Tyre had provincial mints during the first half of the third century A. D. (Wruck, *op. cit.*, 6; Mattingly-Sydenham, *Roman Imperial Coinage*, IV, 1 [1936], 19 f.).

semiuncius, peruta).<sup>19</sup> Furthermore, it can be made clear from our authorities that most changes made in the coinage system of Syria, Palestine, Arabia and Mesopotamia during the second and third centuries A. D. correspond in a surprising manner to contemporary changes in Egyptian currency.<sup>20</sup> A tradition in the Mishna and the Talmud, which must belong to the second century A. D., relates that the aureus had at times the value of only 24 instead of 25 denarii.<sup>21</sup> This indicates a fall in the price of gold which almost corresponds to the depreciation of the gold standard as recorded in Egyptian papyri of the second century.<sup>22</sup> From about the time of Nero and to a greater degree from the time of Trajan the copper content of the Syrian provincial drachma increased.<sup>23</sup> In this connection a tradition of the Mishna from the time of Trajan and Hadrian mentions 4 "asper" (an ἄραξ λεγόμενον), probably an "asper" tetradrachmon, which had the value of only three normal provincial drachmae.<sup>24</sup> The Aramaic

<sup>19</sup> Krauss, II, 404 f.; S. Ejges, *Das Geld im Talmud*, phil. diss. Giessen (1930), 57 f.; E. Lambert, *Rev. Et. Juives*, LI (1906), 222 f.; B. Zuckermann, *Ueber talmudische Münzen und Gewichte* (1862), 13 f. *passim*. Peruta is the Aramaic term for the previously mentioned lepton. The maa is worth one-sixth of the provincial denarius, i. e. in the present writer's opinion one-eighth of the imperial denarius or one-half of the imperial sestertius = 2 Syrian dupondii (or 4 Syrian asses) = 1 imperial dupondius (or 2 imperial asses). This equation is proved by the Talmudic equation of 1 maa = 4 Syrian asses. See also *M. Baba Mezia* IV 3 (see § II) as well as *Bab. Bekhor.* 50 (see note 46) and *Bab. Kiddush.* 12a (see note 28); *Pal. Kidd.* I 1, 58d 30: 1 maa = 4 Syrian asses = one-sixth drachma, i. e. (= one-eighth imperial denarius = 1 imperial dupondius). The maa was a silver coin according to the Talmud. But silver obols are not known to have been struck in the Roman Near East after Augustus. W. Wruck suggests in a letter that the obols of the Phoenician towns in the Hellenistic age remained also in use during the first centuries A. D. Such an ὀβολὸς ἀργυρεὸς seems to be mentioned in an official tariff of customs from Transjordan (Cagnat, 1283). According to *Bab. Baba Mezia* 47b the follis was for R. Johanan bar Nappaha *דשמון*, i. e. he used this expression like his contemporaries Ulpian and Paulus (*Dig.*, XVI, 3, 29; XL, 7, 3 § 6) only for purses filled with a certain quantity of coins, and not, as it became usual later, for the coin itself which was used for this purpose. See also note 56.

<sup>20</sup> *Econ. Surv.*, II, 425 f.; F. M. Heichelheim, in *Journ. Rom. Stud.*, XXVII (1937), 285 f.

<sup>21</sup> *Pal. Kidd.* I 1, 58b; *M. Meila* VI 4: "If he gave him two perutas and said: 'Bring me a citron,' and he went and brought him a citron for one peruta and a pomegranate for the other, they are both guilty of sacrilege. . . . If he gave him an aureus and said to him: 'Bring me a shirt,' and he went and brought him a shirt for three tetradrachms and a cloak for three tetradrachms, they are both guilty of sacrilege." Cf. Zuckermann, 18; see also notes 5 and 46 on *Bab. Bekhor.* 50b.

<sup>22</sup> *Econ. Surv.*, II, 425 f. and nr. 275, 276, 285; F. M. Heichelheim, *loc. cit.*

<sup>23</sup> Wruck, *op. cit.*, 166.

<sup>24</sup> *M. Maasser Scheni* II 9 = *M. Edujot* I 10: "If a man would change a tetra-

term "asper" is believed to be derived of Greek *ἀσπρὸς* "white." If that is so, the "asper" must represent the provincial depreciated silver coin of Trajanic and Hadrianic time, which had certainly a lesser value, and *ἀσπρὸς* might have meant in Syria what *ῥυπαρὸς*, in the present writer's opinion, meant in Egypt (*Econ. Surv.*, II, 429 f.).

All coin struck in copper, and in any case the copper coins which were not issued by the provincial mints, were as in Egypt often reckoned according to two larger units of account: the so-called "small denarius" and "small stater"; but these units had respectively the value of only one-eighth of the provincial drachma and of one-eighth of the stater "of the country," i. e. of the Syrian provincial tetradrachmon.<sup>25</sup> There was a far greater disparity in value between the silver and copper coinage of Syria than between the *ἀργυρίου* and the *χαλκοῦ* drachma in Roman Egypt;<sup>26</sup> nor is this surprising, when we consider the numerous places in Syria, Palestine, Transjordan and Mesopotamia in which copper coins were minted. We learn from the Talmud that the dupondius of certain regions was valued in certain others as one as;<sup>27</sup> and there was a very great danger in large-scale transactions—where the units of account for copper, the "small denarius" and "small stater" were needed—that the payment of copper might contain imperfect, obsolete or even forged coins.

The relation of the value of provincial copper and silver coinage was sometimes changed—another analogy with imperial Egypt. According to the earliest Talmudic traditions the Syrian peruta (= *λεπτόν*) was worth one-eighth of an as and  $\frac{1}{192}$  of the provincial drachma.<sup>28</sup>

drachmon of second tithe money in Jerusalem . . . (the pupils of R. Akiba [c. 150 A. D.]) say: 'Three denarius' worth of silver and one of copper.' R. Akiba (Trajan and Hadrian) says: 'Three denarius' worth of silver and from the fourth a quarter in copper coin.' R. Tarfon (Nero to Hadrian) says: 'Four asper in silver.'"

<sup>25</sup> Ejges, *op. cit.*, 64; *Bab. Chull.* 44b; *Bab. Shabb.* 119a; *Bab. Kethub.* 65b; 67a. See also note 46.

<sup>26</sup> *Econ. Surv.*, II, 431; Heichelheim in *Econ. History* (1935), 6.

<sup>27</sup> M. *Maasser Scheni* IV 8 (tradition of the second century A. D.).

<sup>28</sup> M. *Kidd.* I 1 and *Bab. Kidd.* 12a: (Mishna): "How much is a peruta? An eighth of an Italian assar. . . . (Gemara): And should you answer: 'That was only in the time of Moses, but nowadays it is as generally estimated'—; but when R. Dimi (reign of Constantine the Great, Babylonia) came, he said: 'R. Simai (early third century A. D.) computed in his time: How much is the peruta? An eighth of an Italian assar.' And when Rabin (reign of Constantine the Great, Babylonia) came, he said: 'R. Dosethai, R. Jannai and R. Oshiah (late second and early third century A. D.) estimated: How much is a peruta? A sixth of an Italian assar.' R. Joseph (reigns of Diocletian and Constantine, Babylonia) answered him:

A provincial copper coin of the lowest denomination belonging to the time of Trajan confirms this tradition: it has the weight of one-eighth of the provincial assar of the same time.<sup>29</sup> On the other hand, the weight of the Syrian provincial copper coinage was depreciated, in comparison with that of Trajan, from the time of Hadrian to a remarkable extent.<sup>30</sup> At the same time (c. 120–c. 180 A. D.) we learn from contemporary references in the Talmud that the peruta had the improved value of 1/144 of the provincial drachma,<sup>31</sup> and we also know from Egyptian sources<sup>32</sup> that from c. Hadrian's reign the χαλκοῦ

'If so, when we learnt: Go out and estimate how many perutas are there in two tetradrachms? More than 2,000. Seeing that there are not even 2,000, can he call it more than 2,000?' Thereupon a certain old man said to him: 'I learned it, close on 2,000. But even so, it is only 1,536.' . . . One denarius = six silver maas; one maa = 2 dupondii; one dupondius = two assars; one assar = two semisses; one semis = two quadrantes; one quadrans = two peruta. Hence the peruta is an eighth of an Italian assar."

"R. Simeon ben Gamliel (c. 130–160 A. D.) said: 'Three hordei = one maa; two bes (?) = one hordeus; two shamnin (= one-eighth as ?) = one bes; two perutas = one shamnin. Hence a peruta equals one-sixth of an Italian assar.' Shall we say that you agree with the first (tradition) whilst Rabin holds with R. Simeon ben Gamliel? He replied: 'Both Rabin and I agree with the first tradition, yet there is no difficulty: Here the assar bears its full value; there it had depreciated. Here the assar bears its full value, twenty four going to the denarius; there it had depreciated, thirty two going to the denarius.'"

<sup>29</sup> Wruck, *op. cit.*, 167 allows two alternative values for this coin, either 1 or 1½ assar. But on the grounds of the statement in the Mishna I think that the first alternative is far more probable.

<sup>30</sup> dupondius	as	semis	lepton
Trajan: 12.17–18.47 g.	8.40–12.98 g.	4.41–5.72 g.	1.22–1.25 g.
average 14.54 g.	aver. 11.526 g.	aver. 5.06 g.	
42 specim.	8 specim.	5 specim.	2 specim.
Hadrian: 12.72–17.95 g.	5.45–7.08 g.	3.73–4.90 g.	0.90–1.18 g.
4 specim.	8 specim.	2 specim.	6 specim.
Pius: ———	9.07–14.71 g.	2.87–4.90 g.	—————
	8 specim.	11 specim.	
Pius and Marcus: ———	8.35–10.64 g.	—————	—————
	2 specim.		
Marcus, Verus: ———	7.91–10.30 g.	2.67–4.63 g.	—————
	5 specim.	2 specim.	

For the time of Trajan see Wruck, *op. cit.*, 166 f.; for the copper coinage of his successors the present writer was able to use the weights of coins in the Kaiser Friedrich Museum (Berlin), kindly communicated by Dr. W. Wruck, and in addition those of unpublished coins in the Fitzwilliam Museum, Cambridge. The depreciation seems to be apparent, perhaps with the exception of the earlier coinage of Antoninus Pius.

<sup>31</sup> *Bab. Kiddush*. 12a; *Pal. Kiddush*. I 1, 58d 30, 40. See note 28.

<sup>32</sup> *Econ. Surv.*, II, p. 432 and nr. 320; *P. Tebt.* II nr. 549 and p. 341; Heichelheim in *Econ. History* (1935), 6.

drachma was increased from 1/400–1/450 to 1/300 of the ἀργυρίου drachma. The copper coinage of Syria and Egypt was accordingly altered in the same proportion at that period, and in addition the weight of the Syrian copper was depreciated from the time of Hadrian; probably because, as is well known, the purity of the imperial<sup>33</sup> as well as of the provincial silver had to a considerable extent deteriorated. It is expressly stated in the Talmud that this increase in the value of the copper currency involved an alteration in the rate of exchange.<sup>34</sup>

In addition to the imperial and Syrian provincial currency the provincial coinage of Cappadocia was also in circulation in the Roman Near East. This is especially proved by the fact that in the time of the Bar-Kochba revolution coins of all three types, stamped with the Jewish devices, were issued by the rebels.<sup>35</sup> Coins of Syria and Cappadocia are often found together in contemporary hoards;<sup>36</sup> copper coins of both countries were interchangeable, and Talmudic traditions of the second and third centuries A. D. make mention of Cappadocian coinage.<sup>37</sup> There is no doubt that after the suppression of the revolt the coins of Bar-Kochba, who had tampered with the Emperor's portrait, were forbidden circulation.<sup>38</sup> A similar fate probably befell the coins of Pescennius Niger struck in the East.<sup>39</sup> According to a late though plausible Talmudic tradition,<sup>40</sup> not only the coins issued dur-

<sup>33</sup> Hammer, *Zeitschr. für Num.*, XXVI (1908), 98 f.; *Econ. Surv.*, II, 440 f. The silver content of the Syrian provincial coinage from the first to the third centuries is completely unknown; but it is improbable that its deterioration differed very much from that in Rome and Alexandria.

<sup>34</sup> *Pal. Kiddush*, I 1, 58d 30 f.; *Bab. Kiddush*, 12a. See note 28.

<sup>35</sup> Madden, *op. cit.*, chapter X; *B. M. O., Palestine*, p. 284 f.

<sup>36</sup> *Dura Rep.*, III, 187; IV, 259, 276; VI, 467; *Antioch*, I (1934), 79 f.; for the hoards from Antioch (nr. 56, third century), Caesarea-Mazaca, Eleutheropolis (second century), Dura-Europos (nr. 346, 350) and Jafa (third century) see S. P. Noe, *A Bibliography of Greek Coin Hoards, Numism. Notes Monogr.*, LXXVIII (1937) s. v.

<sup>37</sup> *M. Kethub*, XIII 11; *Bab. Kethub*, 110b; *Pal. Kethub*, 36c. Pontic (*Dura Report*, III, 106; IV, 202) as well as Peloponnesian coins were most probably introduced into Syria by the army during Caracalla's Parthian campaign (H. Seyrig, *Syria*, XVII [1936], 174 f.). See also Noe, *op. cit.*, nr. 1035.

<sup>38</sup> *Pal. Maasser Scheni* I 2, 52b.

<sup>39</sup> *R.-E.*, Art. Pescennius, 1088/9; *Bab. Baba Mezia* 40b (according to the translation and interpretation of the edition of Goldschmidt); Mattingly-Sydenham, *Roman Imperial Coinage*, IV, 1 (1936), 19 f.

<sup>40</sup> *Bab. Baba Quamma* 97b (fourth century A. D.): "Raba (reigns of Diocletian and Constantine, Babylonia) said: 'One may not redeem with coinage which is not in circulation; if for example a man has coins of Bar Kochba, of Jerusalem or of the first kings, he shall not redeem with them. . . .' Raba asked R. Hilda: 'What

ing the rebellion of 66/70 A. D. but also those of the Jewish kings were forced out of circulation by the Romans. In any case, Jewish and Roman coins have extremely seldom been found together in coin hoards of the period after 70 A. D.<sup>41</sup>

The comparative stability of the currency in the Roman Empire from the time of Augustus to that of Marcus Aurelius was seriously affected, as is well known,<sup>42</sup> from approximately the periods of Commodus and Septimius Severus. Here for the first time I am publishing all the documentary evidence for Roman Syria, Palestine, Arabia and Mesopotamia referring to that inflation. Egypt alone provides more material than those provinces for the history of Roman and provincial coinage after Marcus Aurelius. The minting in copper was very irregular in standard. We learn from Talmudic traditions of about the time of Commodus that not only the peruta was depreciated again to 1/192 of the provincial drachma<sup>43</sup> but that sometimes two provincial drachmae were worth 2,000 peruta<sup>44</sup> and that the denarius on occasions had the value of 32 instead of 24 provincial assars. It is very probable from the changed appearance and colour of the Syrian tetradrachmon after the time of Marcus Aurelius that its metal was debased; in any case, its weight was reduced;<sup>45</sup> but its value was sometimes higher than that of the contemporary imperial denarii inasmuch as the latter had been debased to a greater extent. This might be another reason for the depreciation of the provincial copper compared with the standard of the provincial silver at the same period. A Talmudic tradition<sup>46</sup> of the years between Commodus and Alexander

if a man has made a loan in coinage which later increases in value?' He answered: 'The borrower shall give him the coinage in circulation.' Raba asked again: 'Even (if the new coin is as large) as a sieve?' He answered: 'Yes.' Raba asks further: 'Even as large as a trita?' He answered: 'Yes. The price of food has gone down.'"

<sup>41</sup> Noe, *op. cit.*, Index s. v. Judaea; G. Hill, *Quart. Depart. Antiq. Palest.*, VI (1936), 78 f.

<sup>42</sup> Heichelheim, in *Klio*, XXVI, 103 f.; in *Econ. Hist.* (1935), 7 f.; in *Journ. Rom. Stud.*, XXVII (1937), 285 f.; *Econ. Surv.*, II, 436 f.; Mickwitz, *Geld und Wirtschaft im röm. Reiche des IV. Jahrh.*, *Soc. Sc. Fenn. Comm. Hum. Litt.* (1932), 33 f., 46 f.

<sup>43</sup> *Bab. Kiddush*. 12a; *Pal. Kiddush*. I 1, 58d 30. See note 28.

<sup>44</sup> *Bab. Kiddush*. 12a.

<sup>45</sup> Dieudonné, in *Rev. Numism.*, XXXII (1929), 25, 136.

<sup>46</sup> *Bab. Bekh*. 50a, b, *passim*: (Mishna): "In Tyrian Coinage." (Gemara): "R. Asi (reign of Diocletian, Palestine) interpreted it as the mine of Tyre, R. Ami (reign of Diocletian, Palestine) as the Arabic denarius, R. Hanina (third century

Severus makes a special point—and this is remarkable—of defining the meaning of “Tyrian coinage,” a term which is found in many earlier parts of the Mishna and Talmud. It states correctly that “Tyrian coinage” denotes the Syrian provincial tetradrachmon and adds that eight of such coins were equal to a Roman aureus of the time. This reference indicates that c. 180–c. 230 A. D. the provincial tetradrachmon had the value of  $3\frac{1}{8}$  and not, as was usual before that period, of 3 denarii. A tradition in the same part of the Talmudic compilation, which dates back to approximately the time of Diocletian, states that the tetradrachmon at some period in the past had the value of  $3\frac{1}{3}$ –4 denarii. A third tradition of the later third century A. D. has no knowledge of the meaning of the term “Tyrian coinage” at all, and consequently might belong to the time after Gallienus in which the Syrian provincial coinage became obsolete. It identifies the “Tyrian coinage” with the old denarii of Trajan and Hadrian, another indication of the date of this tradition, which must belong to the time between Gallienus and Diocletian when the imperial denarius experienced its worst fall and old imperial silver coins were used as its substitute in Egypt and in many coin hoards within and without the Empire.<sup>47</sup>

We also have direct evidence for the deterioration of the denarius in the Roman Near East from the time of Commodus. A dated in-

A. D., Babylonia and Palestine) as the Syrian stater of the value of one eighth of an aureus. . . . R. Johanan (third century A. D., Tiberias and Sepphoris) interpreted it as the worn denarius of Hadrian and Trajan of the value of one twenty-fifth of the aureus. . . . Raba (reigns of Diocletian to Constantine, Babylonia) said: ‘The tetradrachmon of the (time of the) Torah was worth  $3\frac{1}{8}$  (Tyrian denarii) . . . and it is handed down that six silver maas were equal to one denarius. . . . The tetradrachmon of the temple was equal to 48 dupondii.’ . . . R. Hanina (third century A. D., Babylonia and Palestine) said: ‘Wherever in the Torah money is mentioned without definition, a *tetradrachmon* is meant, in the Prophets a *litra*, and in the Hagiographs a *centenarius* (i. e. 100,000 sesterterii or perhaps one aureus; see *R.-E.*, Art. *centenarius* nr. 1 and nr. 2; *Thes. Ling. Lat.*, III, 813). . . . And there are regions where the *centenarius* is called *shekel*.’ . . . Abajje (reigns of Diocletian to Constantine, Babylonia) answered (a certain question): ‘They (i. e. the Jews after the rebellion of Bar Kochba) intended to hide the worn denarii of Trajan and Hadrian, because (the treasures) of Jerusalem might have been coined (and to use such money would have been sacrilege); but they found a passage in the Bible, on account of which they permitted its use.’ . . . If anyone strikes his neighbour, he has to pay him a tetradrachmon (i. e. a stater). This means not a tetradrachmon of four denarii, but of one half denarius, because the people were accustomed to call one half denarius a (small) stater. . . .’

<sup>47</sup> Mickwitz, *op. cit.*, 53 f.; Heichelheim, in *Klio*, XXVI, 107, 111 f.

scription from Palmyra shows us that immediately after the death of Commodus the denarius already had fallen into such disrepute that gold coins were used by caravans even when silver was more practical; on the other hand, inscriptions from the Palmyra of the first and second centuries A. D. indicate that the denarius was used at that time, even when we should expect the use of gold.<sup>48</sup> In the light of these inscriptions it is clear that it was not by chance that the famous Talmudic authority Rabbi in his old age, which was contemporary with the inscription mentioned above, reversed his earlier principle "silver buys gold" into "gold buys silver";<sup>49</sup> and in addition, the Talmud states expressly that the silver coins of Septimius Severus had less value.<sup>50</sup>

*Bab. Baba Mezia* 44a and b: "Rabbi (135-c. 210 A. D.) taught his son R. Simeon: 'Gold acquires silver.' Said he to him: 'Master, in your youth you did teach us silver acquires gold; now, advanced in age, you reverse it and teach gold acquires silver.' . . . Rab (early third century A. D., Palestine and Babylonia) once borrowed aurei from R. Hiyya's daughter. Subsequently, aurei having appreciated, he went before R. Hiyya: 'Go and repay her current and full-weight coin,' he ordered. . . . The peruta which the (sages) spoke of is an eighth of an Italian assar. . . . The assar is a twenty fourth of a silver denarius. . . . A silver denarius is a twenty fifth of an aureus."

That there was an inflation at this time is proved by an unusual juridical case discussed by Rabbi, whom we have mentioned above as living in the time of Commodus and Septimius Severus. Rabbi raises the problem of what ought to be done if an animal is accidentally killed and becomes more valuable dead than alive. According to economic law such a case could only have arisen during a time of inflation.<sup>51</sup> Talmudic traditions of the same period also mention prices and wages which must refer to a period of inflation: for instance a set of jewels, valued by Rabbi at 600,000 denarii, acquires the value of 800,000 denarii in a later estimate of the third century A. D.; and wages of craftsmen, which amount to 1,200 and 2,400 denarii in estimates of

<sup>48</sup> See the inscription mentioned § III (April, 193 A. D.), and § IV notes 10 and 17, Heichelheim in *Econ. Hist.* (1935), 8 f.

<sup>49</sup> Marmorstein, *Rev. Et. Juives*, XCVIII (1934), 36; Krauss, II, 714 note 649; Ejges, *op. cit.*, 45 f.; Heichelheim, in *Journ. Rom. Stud.*, XXVII (1937), 285 f.

<sup>50</sup> *Pal. Kethub.* 25, 2 (tradition of the third century).

<sup>51</sup> *Bab. Baba Quamma* 34b finis.



the second century A. D., are increased to 2,400 and 4,800 denarii in an estimate of Rabbi. This is a well-known casuistic method of artificial revaluation paralleled by authorities of the *Corpus Juris* who also belong to the third century A. D.<sup>52</sup> A coat mentioned in a Talmudic passage of the third century A. D. has ten times the value of suits of the high priests during the first century A. D. An inscription of 254 A. D. from Palmyra mentions a gift of no less than 10,000 Ἀττικάι drachmae (= denarii),<sup>53</sup> and another inscription of 297 A. D. from Bostra, even the vast sum of 150,000 of the deteriorated denarii of Diocletian.<sup>54</sup> The inscriptions from Dura also point to a price revolution in the third century A. D. The price of bread in Palestine during the second century A. D. was  $\frac{1}{2}$  to 1 imperial as. A unit of bread, most probably a few loaves, costs 3 denarii in the Dura of c. 235/40 A. D. The normal daily wage in Palestine seems to have been in the first and second centuries A. D. c. 1 denarius. In Dura c. 230/40 A. D. we find that monthly wages were as much as 301-307 denarii, i. e. daily wages of c. 10-15 denarii.<sup>55</sup>

Further, it can be shown that the aureus also was affected by the currency difficulties of the third century A. D. The Palmyrene inscription of 193 A. D., which we mentioned above, refers to χρυσᾶ παλαιὰ δηνάρια and not to aurei of the time of Commodus and Septimius Severus. It can be inferred from this that there was a distrust not only of Roman silver but even of the recently issued aurei. We may conclude from a passage of *Pal. Maass. Scheni* IV 1, 54d 9, that in Palestine at some period during the latter half of the third century A. D. the aureus was worth only 2,000 instead of (as was normal) 4,800 peruta, and that the value of the aureus was subject to local variations. The same Talmudic passage and *Pal. Baba Mezia* IV 1, 9c mention a so-called *leukon*, which according to the context must have been gold. But its value is so small that it probably was merely

<sup>52</sup> T. Frank, *Econ. Hist. of Rome* (1927), 489; Mickwitz, *op. cit.*, 37; Heichelheim, in *Klio*, XXVI, 104. See also the lists of wages and prices in chapt. II § VII, and for *Bab. Joma* 38a see chapt. III § I.

<sup>53</sup> Cagnat, 1047 = *C. I. S.*, II, 3, I, nr. 3934.

<sup>54</sup> Cagnat, 1317. See chapt. I § II note 21.

<sup>55</sup> *S. E. G.*, VII, 411. The sum of c. 300 denarii is quite impossible for a daily wage and too small for an annual wage, as compared to the normal Palestinian wages. If the sums in *S. E. G.*, VII, 411 represent half-yearly wages, this would indicate a daily wage of c. 2 denarii, which is double the normal Palestinian wage. See chapt. II § VII.

a unit of account used in transactions involving gold at a time when gold coins were reckoned by weight. Such methods of payment, as that by ingots, became necessary in the third century A. D. because gold coins had no certain standard weight, and must have prepared the way for the later solidus and *κεφάλαια* accounts.<sup>56</sup> It is not surprising that as in the case recorded in Pap. Oxyrh. 1411 (*Econ. Surv.*, II, nr. 281) of Egypt so also in Palestine and Syria issues of imperial coins were occasionally refused by the population, as Talmudic traditions of the third century A. D. show.<sup>57</sup> Authorities of the early and later third century A. D. laid down the rule that debts must be repaid in current coinage to the full value of the original loan, even when the contract had expressly stipulated a particular coinage which was no longer legal tender (n. 40). The Emperor Aurelius was compelled to crush a rebellion of the mint officials of Antioch (Malal., XII, 301) who had rejected his reforms, and Diocletian had to reorganize and to rebuild the mint of that town (Malal., XII, 308). The debased denarii of his period and of that of his successors are mentioned in an inscription from Bostra and by Eusebius (*Hist. Eccl.*, IX, 8, 4), who speaks of Ἀττικά drachmae in the same way as the inscription from Palmyra mentioned before. The coin lama (= nummus), occurring only in Talmudic passages which are not earlier than Diocletian,<sup>58</sup> might very well represent his new silver sesterlius, which was probably called an Attic drachma in Egypt.<sup>59</sup> Finally, the coinage reforms of the period from Diocletian to Constantine might also be indicated in a contemporary Talmudic discussion<sup>60</sup> of the following case: A lends B a certain number of coins. Before the time comes for the return of the loan, the coins increase in value. Ought B to pay back a proportionally smaller sum? The significance of this question becomes clear when we remember that during the years from Diocletian to Constantine many attempts were made to raise the value of the coinage.<sup>61</sup>

<sup>56</sup> Heichelheim, in *Klio*, XXVI, 98; see also *Bab. Baba Mezia* 47b: . . . "But, said R. Johanan (third century A. D., Sepphoris and Tiberias) what is *asemon*? A follis."

<sup>57</sup> *Bab. Baba Quamma* 97b; *Bab. Baba Mezia* 46b; *Pal. Maass. Scheni* I 2, 52d; *Ejges, op. cit.*, 30/1; Heichelheim, in *Journ. Rom. Stud.*, XXVII (1937), 285 f.

<sup>58</sup> *Bab. Baba Quamma* 97a, b; *Bab. Aboda Zara* 34b.

<sup>59</sup> Heichelheim, *Symbolae Osloenses*, XIV (1935), 84 f.

<sup>60</sup> *Bab. Baba Quamma* 97a, b.

<sup>61</sup> Mickwitz, *op. cit.*, 98 f.; Mickwitz, *Soc. Scient. Fenn. Comment. Hum. Litt.*, VI, 2, p. 2 f., 28 f.

### v. Banking, Loans and Deposits. Loans of Seed

Although we do not know so much about the banking affairs of the Roman Near East as about those of Egypt, we know enough to make a general survey. As in Egypt, the chief town of each district had retained its βασιλικαὶ τράπεζαι from Hellenistic times; we find these especially in Galilee.<sup>1</sup>

The profession of exchange banker was so frequent in the Roman Near East, where many different coins were used, that our authorities speak almost exclusively of this type of banker. The κολλυβιστικαὶ τράπεζαι and the κερματισταὶ near the temple at Jerusalem are well known from the Gospels,<sup>2</sup> and in addition a *nummularius*<sup>3</sup> is mentioned in an inscription from the Roman citizen colony of Berytus. There existed a distinctive group of Jewish bankers, the so-called *schulchanim*, whose main business was currency exchange in accordance with the biblical prohibition against taking interest; we hear of many very interesting details of these activities from the Talmud.<sup>4</sup> There was no prohibition against giving deposits to a *schulchani*, but only on condition that he demanded no extra payment and made the business the favour of a friend;<sup>5</sup> similarly a *schulchani* could give and take loans, but only without interest.<sup>6</sup> A most interesting feature of the *schulchani's* business was the payment on request of sums deposited with him for the purpose.<sup>7</sup>

M. *Baba Mezia* IX 12: "If he gave him an order to a shopkeeper or a money-changer (to supply him to the extent of his wages) he is not guilty of refringement."

On the other hand, ordinary deposits were usually handed over to the temple authorities—to the temple at Jerusalem by Jews<sup>8</sup> (or to some

<sup>1</sup> Joseph., *Vita*, 9, 33: "Sepphoris, by submission to Rome, had forthwith become the capital of Galilee and the seat of the royal bank and the archives."

<sup>2</sup> Matth., XXI, 12 f.; Mark, XI, 15/6; John, II, 14 f.

<sup>3</sup> *Année épigr.*, 1922, nr. 60.

<sup>4</sup> Krauss, III, 411 f.; E. Lambert, *Rev. Etud. Juives*, LI (1906), 217 f.; 52 (1906), 24 f.; Ejges, *op. cit.*, 73 f.; A. Gulak, *Études de Papyrologie*, I (1932), 99.

<sup>5</sup> Ejges, 79 f.

<sup>6</sup> Ejges, 82.

<sup>7</sup> Ejges, 37, 83 f., 92 f.; see also *Bab. Baba Quamma* 104b; *Pal. Baba Mezia* IX 13, 12b; *Bab. Baba Mezia* 112a; *Pal. Baba Mezia* IV 1, 9d; *Pal. Kiddush*. I 6, 61a; *Pal. Shekal*. IV 1, 48a.

<sup>8</sup> Joseph., *Bell.*, VI, 5, 2, 282.

friends)<sup>9</sup> and to pagan temples by non-Jews.<sup>10</sup> Debts could be repaid in regions far distant from those in which they had been incurred, especially in Rome; similarly debts incurred in Rome could be discharged in Syria.<sup>11</sup>

*Dig.*, XLV, 1, 122 § 1: "Scaevola (reigns of Marcus Aurelius and Commodus) in the 28th book of the *Digesta*: . . . : Callimachus contracted for a shipping loan from Stichus, the slave of Seius, in the province of Syria for a voyage from the state of Berytus to Brundisium (and back); and it was to be valid for all the 200 days of the voyage, with pledges and guarantees on the merchandise brought from Berytus and transported to Brundisium, and on the merchandise which would be bought at Brundisium and carried by ship to Berytus. And they came to the agreement that when Callimachus had reached Brundisium up to the Ides of September, which were then close at hand, he should buy other merchandise and himself travel by sea to Syria on his merchant-ship; or else if he had not obtained merchandise within the above-mentioned time and had not set sail from that town, he should repay the whole of the money immediately as if the voyage were completed, and should provide all expenses to those who came to claim the money so as to bring it to Rome. Callimachus promised at the request of Stichus, the slave of Lucius Stichus, to repay the money in accordance with the agreement."

Transfer of capital between Palestine and Babylonia was conducted regularly by means of Jewish agents.<sup>12</sup> Both the temple at Jerusalem<sup>13</sup> and pagan temples<sup>14</sup> received endowments in money from the whole Roman Empire as well as from Babylonia and Arabia. It is also worth noting that transfer of capital from Antioch to Athens was possible as late as the time of Libanius.<sup>15</sup>

The new parchments, papyri and graffiti from Dura Europos shed considerable light on the problem of loans in the Roman Near East, a matter in which our Jewish authorities did not take much interest.<sup>16</sup> Nevertheless, the Talmud speaks of various types of deeds relating

<sup>9</sup> Dura Pg. 73; Joseph., *Ant.*, XIV, 14, 1, 372; XVI, 9, 1, 279; 10, 8, 343; *Bell.*, I, 14, 1, 276.

<sup>10</sup> J. Korver, *De Terminologie van het crediet-wezen in het Grieksch.*, Phil. diss. Utrecht (1934), 28 f., 33.

<sup>11</sup> Joseph., *Ant.*, XVIII, 6, 2-4, 147 f.; see also M. P. Charlesworth, *Five Men* (1936), 8 f., 16; *R.-E.*, Art. Thallos nr. 5.

<sup>12</sup> Joseph., *Ant.*, XIX, 9, 1, 312/3.

<sup>14</sup> Lucian, *De Dea Syria*, chapter 10.

<sup>13</sup> See chapt. IV § IV.

<sup>15</sup> Liban., *Or.*, I, 26/7.

<sup>16</sup> R. Salomon, *Le prêt à intérêt en la législation juive* (1932); Krauss, II, 354 f., III, 187 f.; A. Büchler, *Der gal. Amhaarez* (1906), 244 f.; A. Büchler, *Jews' College Public.*, IV (1912), 39; S. Krauss, *Lehnwörter*, II, 634/5; G. I. Webber, *Journ. of*

to debts which were usual in Palestine and Babylonia. We hear of normal documents signed by witnesses, of bonds entered in official registers, of "*pisteis*," of the so-called "*cheirographa*" (which were without the signatures of witnesses), and of mortgages on movable and immovable goods. As a result of the great revolts the indebtedness of the Jewish population in the Roman Near East seems to have been at times overwhelming.

In addition the Dura texts give us an ἀντίχρησις, stipulating the performance of slave services by a free person,<sup>17</sup> a παρακατάθήκη,<sup>18</sup> an ἀντίχρησις or παραμονή,<sup>19</sup> various ὑποθήκαι and several pawns for mortgages mentioned in some Dura graffiti.<sup>20</sup> It is almost unnecessary to refer to the parables in the New Testament which speak of loans from master to servant for business purposes.<sup>21</sup> Again, in *Dig.*, XLV, 1, 122 § 1 we hear of a most remarkable *fenus nauticum* supposedly made in Berytus towards the end of the second century A. D. The loan was made by the slave of a wealthy Roman citizen, apparently a professional money-lender, to a merchant travelling between Berytus and Brundisium. A legal dispute followed this transaction, an occurrence still frequent in Antioch as late as the time of Libanius.<sup>22</sup> We also know of the existence of many official registries in the Roman Near East in which documents concerning debts might be deposited or noted down. We find them especially in Jerusalem, Sepphoris, Dura, Edessa and Antioch on the Orontes under the names either of ἀρχεῖον and χρεοφυλάκιον, where both depositing and registering were possible, or of χρηματιστήριον, where only the latter was practised. The destruction of such archives and registries was a usual aim of social revolts.<sup>23</sup>

*Comparative Legislat.*, 3rd Ser., XV (1933), 106 f.; I. Herzog, *Main Institutions of Jewish Law*, I (1936), 137 f., 163 f., 201 f., 319 f., 339 f., 345 f., 361 f.; A. Gulak, *Das Urkundenwesen im Talmud* (1935), *passim*; A. Gulak, *Études de Papyrologie*, I (1932), 97 f.; E. Schoenbauer, *Archiv für Papyrusforschung*, XII (1937), 194 f.; L. Wenger, *ibid.*, 287 f.; J. H. Rappaport, "Das Darlehen nach talmudischen Recht," *Zeitschr. vergl. Rechtswiss.*, XLVII (1933), 256 f.; M. Baba Mezia V 3; *Bab. Baba Mezia* 63a; *Pal. Baba Mezia* V 10b 13.

<sup>17</sup> Dura Pg. 10.

<sup>18</sup> Dura Pg. 26.

<sup>19</sup> Dura Pg. 73.

<sup>20</sup> *S. E. G.*, VII, 428-430.

<sup>21</sup> Matth., XVIII, 24 f. = Luke, XIX, 12 f.; Matth., XXV, 14 f.; Luke, VI, 34 f.; VII, 41 f. See also I. Ziegler, *Die Königsleichnisse des Midrasch* (1903), 246 f.

<sup>22</sup> Liban., *Or.*, LI, 6.

<sup>23</sup> Joseph., *Bell.*, II, 17, 6, 427; VI, 6, 3, 354; VII, 7, 4, 61; *Vita*, 9, 38; C. B. Welles, *Savign. Zeitschr. Rom. Abt.*, LVI (1936), 104 f., 122 f.; A. R. Bellinger,

Finally, we find in several authorities references to seed loans. Herod the Great proved to be not only a popular benefactor in the time of a famine but also an excellent business man.<sup>24</sup> A very great quantity of corn (800,000 Attic medimnoi) was imported by the king into Palestine at a considerable sacrifice on the part of the royal household; not only was this used to feed the hungry population of Palestine without remuneration, but a large amount was dispensed as seed loans to the peasants of Palestine and even of Roman Syria who had consumed the corn which they ought to have saved for seed. Since the usual rate of interest for seed loans at this time was about 50 per cent. (*Econ. Surv.*, II, 460 f.), the repayment in kind of the seed loans and of the interest must have made Herod a wealthier but possibly a much less popular man than before. We are also told by the Mishna (second century A. D.) of other seed loans, which were not so large however as those contracted by Herod.<sup>25</sup>

*Yale Class. Stud.*, V (1935), 137 f.; Dura Pg. 23; G. I. Webber, *Journ. of Comparat. Legislat.*, 3rd Ser., XV (1933), 105 f. See also chapt. I § IV note 17, chapt. II § III note 18.

<sup>24</sup> Joseph., *Ant.*, XV, 9, 1/2, 299-316, 318; *Bell.*, I, 21, 11, 424.

<sup>25</sup> *M. Baba Mezia* V 8.

## CHAPTER IV

### PUBLIC, MUNICIPAL AND TEMPLE FINANCES

#### i. *Monopolies*

Monopolies existed in the Roman Near East as a survival of Hellenistic financial administration<sup>1</sup> and were especially characteristic of the suzerain states in the Roman sphere of influence. Palmyra seems to have had a monopoly in the sale of salt.<sup>2</sup> Furthermore, she imposed not only import duties on oil and myrrh but also duties on their sale.<sup>3</sup> These were not monopolies, but their organization is so analogous to the changes in the Ptolemaic oil monopoly which were effected by the Romans in Egypt<sup>4</sup> that the comparatively simple regulations of Palmyra in the second century A. D. seem very likely to have been preceded by genuine Seleucid oil and *aromata* monopolies.

Similarly Josephus reports that the town of Caesarea Philippi in Palestine, which was under the rule of a Jewish king, had an import duty on oil and that this caused the prices of oil in that town to be ten times higher than in the neighbouring country of Galilee, which was under direct Roman rule.

Joseph., *Vita*, 13, 74/5: "This knavish trick John followed with a second. He stated that the Jewish inhabitants of Caesarea Philippi, having by the king's order been shut up by Modius (?), his viceroy, and having no pure oil for their personal use, had sent a request to him to see that they were supplied with this commodity lest they should be driven to violate their legal ordinances by resort to Grecian oil. John's motive in making this assertion was not piety, but profiteering of the most bare-faced description; for he knew that at Caesarea two sextarii were sold for one drachma, whereas at Gischala eighty sextarii could be had for four drachmae. So he sent off all the oil in the place, having ostensibly obtained my authority to do so. My permission I gave reluctantly, from fear of being

<sup>1</sup> *R.-E.*, Art. Monopole; M. Rostovtzeff, "Seleucid Babylonia," *Yale Class. Stud.*, III (1932); McDowell, *Univ. of Michigan Studies, Hum. Ser.*, XXXVI (1935); *S. E. G.*, II, 663; F. M. Heichelheim, *Economic History* (1938), 7 note 7.

<sup>2</sup> *R.-E.*, Art. Monopole, 198; Rostovtzeff, *loc. cit.*, 83/4; McDowell, 189/90; Heichelheim, *loc. cit.*

<sup>3</sup> Rostovtzeff, *loc. cit.*, 83; McDowell, 189/90; Heichelheim, *loc. cit.*; *C. I. S.*, II, 3, I, nr. 3913.

<sup>4</sup> *R.-E.*, Art. Monopole, 195 f.; *Economic Survey*, II, 328.

stoned by the mob if I withheld it. Thus having gained my consent, John by this sharp practice made an enormous profit."

Joseph., *Bell.*, II, 21, 2, 591/2: "With the avowed object of protecting all the Jews of Syria from the use of oil not supplied by their own countrymen, he sought and obtained permission to deliver it to them at the frontier. He then bought up that commodity, paying Tyrian coins of the value of four Attic drachmae for four amphorae, and proceeded to sell half an amphora at the same price. As Galilee is the special home of the olive and the crop had been plentiful, John, enjoying a monopoly . . . , amassed an immense sum of money."

This import duty might also have been a survival of an older monopoly like the one at Palmyra mentioned before.

The temple district of Baitokaike in Syria had a complete sales monopoly.<sup>5</sup>

Cagnat, *I. G. R. R.*, III, 1020 — *O. G. I. S.*, 262.

Baitokaike.

Decree of the town (of Apamea?) sent to the God Augustus.

It is necessary that all merchandise (destined for the temple district of Baitokaike) should pass through the hands of the sales-officials of those regions and of the territory (of the *polis*), in order that they may be sold at every festival month so that they may be continually at the disposal of the worshippers who go there. The sales-officials of the town shall take care (of the business) and not interfere nor molest anyone under pretext of compulsory quartering, of taxation, of some official charge (?) or legal sum. Slaves, animals and other living creatures shall be sold in the district exempt from tax, official charge (?) and legal sum. . . .

Officials of the town of Apamea (or of another town in the neighbourhood) sold to the inhabitants of the place all they needed. Probably other holy places in Syria were subject to similar regulations.

The balsam plantations in Palestine according to Pliny constituted an actual monopoly of the Roman fiscus, from which the income was not less than many millions of sesterii during approximately the first five years of Roman administration.<sup>6</sup>

Plin., *N. H.*, XII, 111/123: "But to all other odours that of balsam is considered preferable, a plant that has been bestowed by nature only on the land of Judaea. In former times it was exclusively cultivated in two gardens, both of which belonged to the kings of that country: one of them was no more

<sup>5</sup> F. F. Abbott-A. C. Johnson, *Municipal Administration in the Roman Empire* (1926), 147.

<sup>6</sup> Blümner, *Röm. Privatalt.* (1911), 638.



than twenty iugera in extent, and the other somewhat smaller. . . . At the present day this tree pays us homage and tribute along with its native land. . . . The Jews vented their rage upon this shrub just as they were in the habit of doing against their own lives and persons; while, on the other hand, the Romans protected it. Indeed, combats have taken place before now in defence of a shrub. At the present day the reproduction of it has become a duty of the fiscal authorities, and the plants were never known to be more numerous or of larger growth. . . . The cuttings, too, form an article of merchandise. The fifth year after the conquest of Judaea these cuttings with the suckers were sold for the price of eight hundred thousand sesterii. The cuttings are called *xylobalsamum*. . . . In no commodity are there practised more palpable frauds than in this, for a sextarius of balsam, which is sold by the fiscal authorities at three hundred denarii, is sold again for a thousand,—so vast is the profit to be derived from increasing this liquid by adulteration. The price of *xylobalsamum* is six denarii per pound.”

The fishing rights in the rivers, in the lakes and in the sea were also claimed by the government—at least theoretically,<sup>7</sup> though a monopolistic use of these rights was made in the case of Tyrian purple at the time of Diocletian.<sup>8</sup> In the previous centuries the Roman government was probably satisfied to grant concessions for the fishing of the purple snails and for the production of the purple. Concessions for fishing may have been given everywhere in the Roman Near East by the Roman government, probably very often to fishing unions and societies as in Roman Egypt (*Econ. Survey*, II, 335). Jewish fishing unions are found at the Lake of Tiberias, in Joppe, and near Akko.<sup>9</sup> During the great Jewish war the *vāvrai* of Tiberias made common cause with the *ἀντοποι*, the proletariat of the town,<sup>10</sup> and the rebellion had not only religious and national but also social causes. Excessive obligations to the government might have been one of the causes of the social unrest in the fishing community of Tiberias.

Hadrian reserved four species of trees growing in the mountains of Lebanon—probably cedars, cypresses, pines and firs—for the exclusive

<sup>7</sup> M. Rostovtzeff, *Geschichte der Staatspacht*, *Philologus*, Suppl. IX (1904), 414 f.; M. Rostovtzeff, *S. E. H. R. E.*, chapter VII note 85.

<sup>8</sup> Euseb., *Hist. Eccl.*, VII, 32: “(Diocletian) the Emperor . . . took him (i. e. Dorotheus) into his friendship and honoured him with the superintendence of the purple dye works at Tyre.”

<sup>9</sup> *Pal. Pesach*. IV 30d; *Pal. M. Katan* II 81b; *Bab. M. Katan* 13b; *S. E. G.*, VIII, 140; Luke, V, 7; 10.

<sup>10</sup> Joseph., *Vita*, 12, 66; M. Rostovtzeff, *S. E. H. R. E.*, chapter VII note 30.

use of the government. Numerous inscriptions referring to this monopoly enable us today to specify to a certain extent the boundaries of the imperial forest domain in Lebanon.<sup>11</sup>

## ii. Taxation

The first Roman organization of taxes in Syria and Palestine was begun by Pompey and elaborated by his successor Gabinus.<sup>1</sup>

Appian, *Syr.*, VIII, 50: "On account of these rebellions (i. e. against Pompey, Vespasian and Hadrian) the poll-tax imposed upon all Jews is heavier than that on landed property (τῆς ἄλλης περὶ οὐσίας). The Syrians and Cilicians are also subject to an annual tax of one-hundredth of the assessed value of the property of each man."

Syria became a province which had to pay taxes; the Maccabaeon kingdom lost all frontier districts and was divided into five *συνόδια* which were self-governing but had the same capital, Jerusalem;<sup>2</sup> and it seems that a *φόρος* had to be paid by Jerusalem and its *συνόδια* as well as by the Lebanon districts, by Sampsigeraunus of Emesa and Arethusa,<sup>3</sup> perhaps by Antioch<sup>4</sup> and most probably by the whole of Syria.<sup>5</sup> If Appian, *Syr.*, VIII, 50, refers to this early period, Syria paid a land(?) tax of 1 per cent., and Judaea must have paid a poll-tax as well as (according to a very probable emendation) a land tax.<sup>6</sup> In any case, Caesar changed a Palestinian land tax in kind, which apparently had existed before his time, into a fourth of the harvest of every second year and gave in addition a port duty at Jaffa, which had been payable to Rome before, to the Jewish state in exchange for a yearly payment of 20,675 modii of corn. This yearly port duty at

<sup>11</sup> *R.-E.*, Art. Libanon (with map); A. Rustum, *Palest. Expl. Quart.*, LIV (1922), 68 f.

<sup>1</sup> Joseph., *Ant.*, XIV, 4, 4, 74; *Bell.*, I, 7, 6, 154; Vell. Pat., II, 37; Plut., *Pomp.*, 39; Dobias, *loc. cit.*; Bouchier, 24/5; A. H. M. Jones, *The Cities of the Eastern Roman Provinces* (1937), 258 f.; H. Willrich, *Urkundenfälschung in der hellenistisch-jüdischen Literatur* (1924), 81 f.

<sup>2</sup> Joseph., *Ant.*, XIV, 4, 4, 74 f.; 5, 3, 88; 5, 4, 91 f.

<sup>3</sup> Cicero, *Ad. Att.*, II, 16, 2; *R.-E.*, Art. Sampsigeraunus nr. 1.

<sup>4</sup> Malal., IX, 225 and for a different interpretation of the passage G. Downey, in *Class. Phil.*, XXXII (1937), 144 f.

<sup>5</sup> Cicero, *De Provinc. Cons.*, V, 10 (see note 10); Vell. Pat., II, 37: "Syria . . . became a tributary (*stipendiaria*) province at this time (i. e. at that of Pompey)."

<sup>6</sup> For the text of Appian see U. Wilcken, *Griechische Ostraka*, I (1899), 247; H. Willrich, *loc. cit.*

Jaffa was probably not unique in Syria and Palestine after Pompey and Gabinius.<sup>7</sup>

Joseph., *Ant.*, XIV, 10, 5 f., 200 f.: "Gaius Julius Caesar, imperator and high priest and dictator the second time, to the magistrates, senate, and people of Sidon, greetings: If you are in health it is well. I also, and the army are well. I have sent you a copy of the decree registered on the tables which concerns Hyrcanus, the son of Alexander, the high priest and ethnarch of the Jews, that it may be laid up among the public records; and I decree that it be publicly inscribed on a table of brass, both in Greek and in Latin. It is as follows: I, Julius Caesar, imperator the second time and high priest, have made this decree with the approbation of the senate: Whereas Hyrcanus, the son of Alexander the Jew, has demonstrated his fidelity and diligence about our affairs. . . . For these reasons I decree that Hyrcanus, the son of Alexander, and his children be ethnarchs of the Jews and have the high priesthood of the Jews for ever, according to the customs of their forefathers; and that he and his sons be our confederates. . . . And I think it not proper that they should be obliged to find us winter quarters or that any money should be required of them. . . .

Gaius Caesar, consul the fifth time, has decreed: That the Jews shall possess Jerusalem and may encompass that city with walls; and that Hyrcanus, the son of Alexander, the high priest and ethnarch of the Jews, retain it in the manner he pleases; and that the Jews be allowed to deduct from their tribute every second year the land is let (in the sabbatic period) a *cor* of that tribute; and that the tribute they pay be not let to tax-farmers; nor that they pay always the same tribute.

Gaius Caesar, imperator the second time, has ordained: That all the country of the Jews, excepting Joppe, pay a tribute yearly for the city of Jerusalem, excepting on the seventh (which they call the sabbatical year), because therein they neither receive the fruits of their trees nor do they sow their land; and that they pay as their tribute in Sidon on the second year (of that sabbatical period) the fourth part of what was sown; and besides this, they are to pay the same tithes to Hyrcanus and his sons which they paid to their forefathers. And that no one, neither consul nor legate nor ambassador, raise auxiliaries within the bounds of Judaea, nor my soldiers exact money of them for winter quarters or under any other pretences; but that they be free from all sorts of injuries; and that whatsoever they shall hereafter possess and are in possession of now, or have bought, they shall retain it all. It is also our pleasure that the city of Joppe, which the Jews had originally when they made a league of friendship with the Romans, shall belong to them as it formerly did; and that Hyrcanus, the son of Alexander, and his sons, have as tribute of that city

<sup>7</sup> Octavianus expressly exempted a certain Seleucus of Rhosos from such *portoria*. See *Syria*, XV (1934), 33 f.

from those that occupy the land and for what they export every year to Sidon 20,675 modii every year, the seventh year which they call the sabbatical year excepted. . . ."

Antony gave tax exemption to the town of Laodicea-Berytus;<sup>8</sup> the kingdom of Herod the Great also seems to have been exempt from Roman taxes during the Augustan period, with the exception of φόροι (= *tributum*) for Samaria and Idumaea which the king had been compelled to pay in the earlier part of his reign.<sup>9</sup> It is possible that before the time of Augustus the Roman *publicani* could only collect the taxes which were due in collaboration with the native upper class, and Cicero's statement that Gabinius had handed over Roman *publicani* as "slaves" to Syrians and Jews may be more than a merely rhetorical accusation.<sup>10</sup> We hear of the young Herod's appointment to some official post in the Roman financial administration.<sup>11</sup> Caesar not only promoted Antipater to be the ἐπίτροπος τῶν πραγμάτων in the Jewish state but made him responsible for the Roman taxes;<sup>12</sup> and πρόσδοι Ἰουδαίας,<sup>13</sup> which were due to Rome, went through the hands of the Herodian family even before Caesar abolished the συνόδια of Gabinius and made the rulers of the new Jewish state responsible for the Roman taxes.<sup>14</sup>

The poll taxes and the land taxes of the Roman Near East were collected directly by officials during the time of the Roman Principate; only the customs, tolls and similar taxes were farmed out to *publicani* as in the time of the Republic. We hear of several Jewish tax-gatherers and tax-farmers:<sup>15</sup> of the τελώνης Johannes from Caesarea, who probably had leased the port duties of this town;<sup>16</sup> of a certain ἀρχιτελώνης Zacharias at the crossing of the Jordan near Jericho;<sup>17</sup>

<sup>8</sup> App., *Bell. Civ.*, V, 7, 30.

<sup>9</sup> App., *Bell. Civ.*, V, 75, 319; *R.-E.*, Art. Herodes (Suppl. II, 26, 55/6, 93).

<sup>10</sup> Cic., *De Provinc. Cons.*, V, 10: As regards the poor tax-farmers . . . (Gabinius) has brought them into the slavery of Jews and Syrians, nations born to serfdom.

<sup>11</sup> Joseph., *Ant.*, XIV, 9, 5, 180; *Bell.*, I, 10, 8, 213; 20, 4, 399.

<sup>12</sup> Joseph., *Ant.*, XIV, 8, 5, 143; 9, 3, 160; 13, 1, 326; *Bell.*, I, 10, 3, 199; 12, 5, 244.

<sup>13</sup> Joseph., *Ant.*, XIV, 9, 3, 163.

<sup>14</sup> Joseph., *Ant.*, XIV, 9, 5, 180; 11, 2, 273 f.; *Bell.*, I, 10, 8, 213.

<sup>15</sup> *Bab. Shebuoth* 39a; *Bab. Aboda Zara* 39a; *Bab. Shabb.* 33b; *Bab. Arakh.* 6a; *Bab. Bekhor.* 31a; *Bab. Baba Quamma* 113a; 114a; H. Dessau, *Geschichte der röm. Kaiserzeit*, II, 2 (1930), 802; A. Büchler, *Der gal. Amhaarez* (1906), 186/7; L. Goldschmid, in *Rev. Etud. Juives*, XXXIV (1897), 195 note 1, 201, 213 f.

<sup>16</sup> Joseph., *Bell.*, II, 14, 4, 287; Dessau, *op. cit.*, note 1.

<sup>17</sup> Luke, XIX, 1.

and of the tax-gatherers of Capernaum on the Lake of Tiberias, who were probably responsible for customs, small port duties and fishing tolls.<sup>18</sup> Inscriptions mention tax-farmers of Palmyra,<sup>19</sup> Edessa,<sup>20</sup> Dura, Seleuceia in Pieria, Berytus, Zeugma, *Δευκὴ κόμμη* at the Red Sea<sup>21</sup> and probably one of Heliopolis.<sup>22</sup> The burden of taxation became more intolerable soon after the death of Augustus; even in 17 A. D. Syria and Palestine officially complained that the *tributum* (i. e. the *tributum soli* and *tributum capitis*) was too heavy.<sup>23</sup> The taxes of Antioch on the Orontes had to be remitted several times.<sup>24</sup>

S. H. A., *Pesc. Niger*, VII, 9: "Likewise, when the people of Palestine besought him to lessen their *censitio* saying that it bore heavily on them, he replied: 'So you wish me to lighten the tax on your lands; verily, if I had my way, I would tax your air.'"

In the second and third centuries A. D. the *βουλευταὶ* (= *curiales*) and the *decemprimi* of the towns or villages and notable persons of the *στρατηγία* (= *τοπαρχία*) had to answer for the full payment of the *aurum coronarium*, of the *annona militaris* and of other taxes imposed on their districts. Very often they took to flight in order to evade these duties.<sup>25</sup>

<sup>18</sup> Matth., IX, 9 f. = Mark, II, 13 f. = Luke, V, 27 f. See also chapter IV § I.

<sup>19</sup> *C. I. S.*, II, 3, I, nr. 3913 I 6; 4235. For *Κλαίς Καίσαρος ἀπελεύθερος*, a *publicanus* of Palmyra or of a neighbouring region see also *O. G. I. S.*, II, p. 331/2; *C. I. S.*, II, 3, I, p. 63.

<sup>20</sup> *Yale Class. Stud.*, V (1935), 137 f. See chapt. II § III note 18.

<sup>21</sup> *S. E. G.*, VII, 570; 591; 593; 623; *Dura Rep.*, II, 156 f.; *Ephem. Epigr.*, V, p. 18 nr. 20, p. 572; *C. I. L.*, III, 6671; Cagnat, 1080; Philostr., *Apoll.*, I, 20; *Peripl. Mar. Erythr.*, 19. See also chapt. II § III note 17.

<sup>22</sup> Cagnat, 1072.

<sup>23</sup> Tacit., *Ann.*, II, 42: "The provinces . . . of Syria and Judaea, exhausted by their burdens, were pressing for a diminution of the tribute."

<sup>24</sup> Malal., X, 246; XII, 298. For remission of taxes during the third and the late Roman centuries see also I. Ziegler, *Die Königsgleichnisse des Midrasch* (1903), 2 f., 45 f.; Goldschmid, *op. cit.*, 212/3.

<sup>25</sup> *Pal. Baba Bathra* IX 6, 17a 13, 15; *Pal. Moed Katan* II 3, 81b 44; *Bab. Baba Bathra* 8a; 144b; *Pal. Joma* I 2, 39a 8; Joseph., *Bell.*, II, 21, 9, 639; *Vita*, 13, 69; 33, 168; Rostovtzeff, *S. H. H. R. E.*, chapters VIII note 45 and IX note 19; R. Boecklin-J. P. Hyatt, *Amer. Journ. Arch.*, XXXVIII (1934), 511 f.; A. Büchler, *Jews' Coll. Publ.*, I (1909), 8 f., 39 f.; IV (1912), 63 f.; A. Büchler, *Der gal. Amhaarez* (1906), 237 f.; S. Klein, *Monatsschr. Gesch. Wiss. Jud.*, LXXVIII (1934), 165 f.; S. Krauss, *Lehnwörter*, II, 140; I. Ziegler, *op. cit.*, 5 f., 55 f., 117 f., 168 f.; E. Stein, *Geschichte des spätromischen Reiches*, I (1928), 71 f.; G. M. Harper, in *Yale Class. Stud.*, I (1928), 144 f.; *O. G. I. S.*, 627; 629, 10, 14; Cagnat, 1013; 1056; 1376; *S. E. G.*, VIII, 9.

*Bab. Baba Bathra* 143a: "The government once imposed *aurum coronarium* upon the *boule* and the *strategia*. Rabbi (c. 135-210 A. D., Sephoris) said: 'The *boule* shall give a half and the *strategia* a half.' . . . There, when an order was issued on previous occasions, it was directed to the *boule*, yet the *strategia* contributed together with them."

In spite of such unjust tax burdens, it is quite likely, if not certain, that the Roman Near East on account of the heavy military expenditure drew more out of the Roman treasury than it contributed.<sup>26</sup> The regular yearly income of the Jewish kingdom under Herod the Great and Agrippa seems to have amounted to not more than approximately 1,000-1,300 Tyrian talents.<sup>27</sup>

Under Caesar the *tributum soli* of Palestine amounted to a quarter of the corn harvest of every second year, i. e. 12½ per cent. The sabbatical year was exempted. After 70 A. D. the whole soil of Palestine became a public domain and was sold or leased to estate owners and tenants.<sup>28</sup> Appian (*Syr.*, VIII, 50) refers to a land (?) tax of 1 per cent. in the Syrian province which was connected with a regular census (*ἐκατοστὴ τοῦ τιμήματος ἐκάστῳ*) and might, in the present writer's opinion, have been introduced earlier than the period of the Principate.

A fixed land tax for vineyards in Palestine during the first half of the second century A. D. seems to have amounted to 15 shekels, i. e. 30 denarii, a very considerable sum.<sup>29</sup> In addition, an unknown per-

<sup>26</sup> Rostovtzeff, *op. cit.*, chapter II note 14.

<sup>27</sup> Joseph., *Ant.*, XVII, 11, 4/5, 318 f.; XVIII, 1, 1, 2; XIX, 8, 2, 352; *Bell.*, I, 18, 5, 362; II, 6, 3, 95 f.; *R.-H.*, Art. Herodes (Suppl. II, 88, 170, 198); S. W. Baron, *Social and Religious History of the Jews*, III (1937), 49/50; M. P. Charlesworth, *Five Men* (1936), 15 f.

Judaea, Idumaea and 75 per-cent of the taxes of Samaria	=	600 talents
25 per-cent of the taxes of Samaria	= c.	50 talents (estimate)
Peraea	=	100 talents
Galilee	=	100 talents
Trachonitis, Hauranitis and Baitanitis	=	100 talents
Jamne, Azot and Phasaelis	=	60 talents
Gaza, Gadara and Hippon	= c.	100 talents (estimate)
Miscellaneous	= c.	100 talents (estimate)

c. 1,300 talents.

<sup>28</sup> See chapter I § III note 19.

<sup>29</sup> See A. Büchler, *Jews' Coll. Publ.*, IV (1912), 62 f. on a late and uncertain tradition in *Mekhil.* 19 I, p. 61 b which perhaps took its origin from the late Roman *iugatio*. For similar late passages see Goldschmid, *loc. cit.*, 198, 204 f., 209. See also chapt. II § I.

centage of the harvest had to be delivered to the Roman granaries each year including even the sabbatical years.<sup>30</sup> Josephus had to pay land tax on the estate in Palestine which Vespasian had given him; Domitian released him from this tax.<sup>31</sup> The Palestinian land tax is also referred to in Eusebius (*Hist. Eccl.*, III, 20) as φόροι, in the *Historia Augusta* (*Pesc. Niger*, VII, 9) as *censitio*, most probably in Appian (*Syr.*, VIII, 50) as tax *περὶ οἰκίας*,<sup>32</sup> as well as in *Bab. Baba Bathra* 8a (a Talmudic passage of the third century A. D.), where a tribute or "royal" tax together with a poll tax and the *annona* is mentioned.<sup>33</sup>

In Jerusalem under the Roman administration there was a house tax, which probably went back to the time of Herod, until Agrippa I came to the throne.<sup>34</sup>

Joseph., *Ant.*, XIX, 6, 3, 299: "When the king (Agrippa I) had settled the high priesthood after this manner, he returned the kindness which the inhabitants of Jerusalem had shown him; for he released them from the tax upon houses, everyone of which had paid it before."

The *λειτουργία ἣν παρείχον ὑπὲρ καπνοῦ* of Antioch on the Orontes, which

<sup>30</sup> *Bab. Sanh.* 26a (a tradition of the early second century A. D.); *Pal. Shebiith* IV 2; Büchler, *op. cit.*, 58.

<sup>31</sup> Joseph., *Vita*, 76, 429. See note 39.

<sup>32</sup> For several difficult passages in Talmud and Midrash which perhaps also refer to the land tax see Goldschmid, *loc. cit.*, 195 note 1, 197 note 4, 204 f.

<sup>33</sup> *M. Baba Bathra* I 4/5 speaks of a contribution of the citizens of a town towards the building and the restoration of the walls. In the second century A. D., i. e. at the date of the passage, the contribution was levied in proportion to property; but there is a tradition in the Mishna (*loc. cit.*) that an earlier regulation imposed a levy on each house, which might have been the house-tax of Josephus. *M. Baba Bathra* I 5, *Bab. Baba Bathra* 7b and 8a: (Mishna): "(The resident of a city) may be compelled to contribute to the building of a wall, folding doors and a cross bar. R. Simeon b. Gamliel (c. 130-160 A. D.) says that not all towns require a wall. How long must a man reside in a town to be counted as one of the townsmen? Twelve months. If, however, he buys a house there, he is at once reckoned as one of the townsmen."

(Gemara): "R. Eleazar (c. 130-160 A. D., Palestine) inquired of R. Johanan: 'Is the impost (for the wall) levied as a poll-tax or according to means?' He replied: 'It is levied according to means, and do you, Eleazar my son, fix this ruling firmly in your mind.' According to another version R. Eleazar asked R. Johanan whether the impost was levied in proportion to the proximity of the resident's house to the wall or to his means. He replied: 'In proportion to the proximity of his house to the wall.' . . . Rabbi (c. 135-210 A. D., Sepphoris) levied the impost for the wall on the Rabbis. . . . Rabbi has explained that (in Ezra, VII, 24) *mina* means the king's tax, *belo* the poll tax and *halach* denotes *annona*."

had to be remitted after an earthquake according to Malalas (X, 246), also seems to have been a house tax.

All men from 14 to 65 years of age and all women from 12 to 65 years were obliged to pay a *tributum capitis* in the Syrian province.<sup>84</sup>

*Dig.*, L, 15, 3: "Ulpian in his second book on the census said: It is necessary to declare the age at the taking of a census, because the age exempts certain persons from the tribute. For example, the poll-tax in Syria is only levied on male persons from fourteen to sixty-five years, and on females from twelve to sixty-five. The age counts from the date of the declaration."

Perhaps the *fiscus Asiaticus* of the Flavian period and of the centuries after had a connection with this tax.<sup>85</sup> At the time of Tiberius Judaea paid a poll tax of one denarius<sup>86</sup> which had been introduced after the dethronement of Archelaos and the confiscation of his kingdom.<sup>87</sup> Vespasian introduced the *fiscus Judaicus*, a poll tax which amounted to two denarii yearly, to take the place of the tithes which had been spent upon the temple before its destruction and assigned it to the temple of Juppiter Capitolinus of Rome.<sup>88</sup>

Joseph., *Bell.*, VII, 6, 6, 218: "On all Jews, wheresoever resident, he (Vespasian) imposed a poll-tax of two drachmae, to be paid annually into the Capitol as formerly contributed by them to the temple at Jerusalem."

Domitian even imposed the tax on those who tried to leave the Jewish community,<sup>89</sup> but Nerva's coin legend, *fisci Judaici calumnia sublata*, shows that the practice was abolished by Domitian's successor, who also exempted the Christian communities from their obligation towards

<sup>84</sup> G. M. Harper, *Yale Class. Stud.*, I (1928), 156 f.

<sup>85</sup> *R.-E.*, Art. *fiscus*, 2404/5.

<sup>86</sup> Mark, XII, 13-17 = Matth., XXII, 15-22 = Luke, XX, 20-26; M. Rist, *Journal of Religion*, XVI (1936), 317.

<sup>87</sup> Joseph., *Bell.*, II, 8, 1, 118: "Judas incited his countrymen to revolt, upbraiding them as cowards for consenting to pay tribute (*phóros*) to the Romans." See also chapt. II § I.

<sup>88</sup> Dio Cass., LXVI, 7, 2; *Economic Survey*, II, 565, 581 f.; *R.-E.*, Art. *fiscus*, 2403 f.; *Encycl. Judaica*, Art. *fiscus Judaicus*; A. Büchler, *Jews' Coll. Publ.*, IV (1912), 61 f.; M. S. Ginsburg, *Jewish Quart. Review*, N. S., XXI (1930/1), 281 f.; A. Momigliano, *Ann. Sc. Pisa*, III (1934), 183 f., 374 f.

<sup>89</sup> Sueton., *Domit.*, 12, 2. See also Joseph., *Vita*, 76, 429: "Domitian . . . exempted my property in Judaea from taxation—a mark of the highest honour to the privileged individual."



the *fiscus Judaicus*.<sup>40</sup> The administrative centre of the *fiscus Judaicus* was in Rome and the contributions of the Jewish communities in the Roman Near East only constituted a portion of its vast income.<sup>41</sup>

A Roman or Nabataean τετάρτη τῶν εισφερομένων φορτίων was levied in Δευκὴ κόμη at the Red Sea; a municipal (?) *tricensima* (*portoriorum*) at Berytus is mentioned in inscriptions; and Apamea probably had taxes on sales, just as Seleuceia in Pieria had them not only on sales of slaves, but also on their export. We also know of a market duty in Jerusalem from the time of the Jewish kings to the first procurators, which Vitellius abolished in 36 A. D.<sup>42</sup>

Cagnat, *I. G. E. R.*, III, 1084.

Deir-el Kalaa near Berytus.

"Lucius Gaius Solon, the father (i. e. the *patronus*) of the community (of tax-farmers) for the 3½% customs duties, erected this."

*C. I. L.*, III, 6671 = Dessau, *I. L. S.*, 5447. Deir-el Kalaa near Berytus.

"To the (goddess) Fortuna (and) to the Genius of the colony (of Berytus). (C. Julius?) Fortunatus, *decurio*, dedicated (the statue of the) Genius together with the pillars, the gable and the incrustation of marble at his own expense, and fulfilled his vow with a willing spirit for his own good, for that of his family and for the community (of tax-farmers) for the 3½% customs duties. (The sculptor was . . . ?)mmius Magnilius."

*Peripl. Maris Erythr.*, 19: "Now to the left of Berenice . . . across the adjacent gulf there is another harbour and fortified place which is called Δευκὴ κόμη, from which there is a road to Petra, which is subject to Malichas, king of the Nabataeans. It holds the position of a market-town for the small vessels sent there from Arabia; and so a centurion is stationed there as a collector of a duty of one-fourth on imported merchandise, with an armed force as a garrison."

Joseph., *Ant.*, XVII, 8, 4, 205: "Some made a claim that he (i. e. Archelaus) would ease them of their annual payments (εἰσφοραὶ ἐνιαύσιαι) . . . ; others of them required that he would take away those taxes which had been severely laid upon what was publicly sold and bought."

Joseph., *Ant.*, XVIII, 4, 3, 90: "Vitellius . . . released the inhabitants of Jerusalem from all taxes upon the fruits that were bought and sold."

<sup>40</sup> *R.-E.*, Art. Cocceius, 146; Mattingly-Sydenham, *Roman Imperial Coinage*, II (1926), 221; *B. M. C.*, *Roman Empire*, III (1936), XLVII f.

<sup>41</sup> Dessau, *I. L. S.*, 1519; *R.-E.*, Art. *fiscus*, *loc. cit.* For the late Roman *capitatio* in Palestine see Goldschmid, *loc. cit.*, 202 f.

<sup>42</sup> *Ephem. Epigr.*, V, p. 18 nr. 20, p. 527; *Econ. Survey*, II, 590; G. M. Harper, *Yale Class. Stud.*, I (1928), 155 f.; Joseph., *Bell.*, II, 1, 2, 4. See also Goldschmid, *loc. cit.*, 201 and for the late Roman *collatio lustralis* = χρυσόπρυπον in Palestine, Goldschmid, *loc. cit.*, 211/2. See also chapt. II § III note 17.

Dura Pg. 20 mentions a municipal (?) tax on the sale of slaves in Edessa during the third century A. D. which was controlled by a "master of taxes" and by his agent (?), most probably *publicani*.<sup>43</sup> There existed municipal taxes on sales of slaves, oil, clothes, hides and furs, together with a pasturing tax on the beasts of foreigners in Palmyra in the first and second centuries A. D.; taxes were also imposed on leather workshops, on butchery, on harlotry and on the use of the water of that oasis.<sup>44</sup> It is probable, if not almost certain, that similar taxes were levied throughout the whole Roman Near East. The emperor was also heir of all estates left by childless persons.<sup>45</sup>

Syria, Palestine, Transjordan and Mesopotamia were divided into numerous customs units under the Principate. All self-governing towns and suzerain principalities had their own customs regulations; as had the different Roman provinces, which were often separated into districts for customs purposes. There are many references to the customs conditions in our authorities: Custom-houses are known to have existed in Jaffa,<sup>46</sup> Gaza,<sup>47</sup> Caesarea, Jericho, Capernaum, Dura,<sup>48</sup> Palmyra and on the Parthian frontier of the Euphrates.<sup>49</sup> The Euphrates customs were almost settled once and for all by Trajan. The notoriety of the tax-farmers and tax-gatherers may be inferred from the Gospels, from the Talmud and from the Midrash.<sup>50</sup> The tax-gatherers of Palmyra exacted many duties which were not pre-

<sup>43</sup> A. R. Bellinger, *Yale Class. Stud.*, V (1935), 137 f.

<sup>44</sup> *C. I. S.*, II, 3, I, nr. 3913 = Cagnat, nr. 1056 = *O. G. I. S.*, 629; D. Schlumberger, "Reflexions sur la loi fiscale de Palmyre," *Syria*, XVIII (1937), 271 f.; H. Dessau, *Hermes*, XIX (1884), 486 f.; M. Rostovtzeff, *Yale Class. Stud.*, III (1932), 74 f.; A. M. Andreades, *History of Greek Public Finances* (1933), 154, 284; I. G. Février, *Essai sur l'histoire politique et économique de Palmyre* (1931), chapter IV *passim* and especially 16, 29 f.; F. F. Abbott—A. C. Johnson, *Municipal Administration in the Roman Empire* (1926), Index s. v. Palmyra.

<sup>45</sup> For Palestine see I. Ziegler, *Die Königsgleichnisse des Midrasch* (1903), 123 f.

<sup>46</sup> See note 7.

<sup>47</sup> Plin., *N. H.*, XII, 63-65.

<sup>48</sup> For the *τέλος πώρας* of Dura see *S. E. G.*, VII, 570; M. Rostovtzeff, *S. E. H. R. E.*, chapter V note 23; *Dura Report*, II, 156 f.

<sup>49</sup> Philostrat., *Apoll.*, I, 20; Fronto, *Princ. Hist.*, 209 (Naber); M. Rostovtzeff, *Gesch. der Staatspacht*, *Philologus*, Suppl. IX (1904), 405 f.

<sup>50</sup> Matth., IX, 9-13 = Mark, II, 13 f. = Luke, V, 27 f.; Luke, III, 12 f.; VII, 29; XVIII, 10 f.; Bab. Shebuoth 39a; Bab. Baba Quamma 113a; 114a; M. Baba Quamma X 2; A. Büchler, *Der galiläische Amhaarez* (1906), 186 f.; J. Jeremias, *Zeitschr. Neut. Wiss.*, XXX (1931), 289 f.; L. Goldschmid, *loc. cit.*, 195, 214 f.; I. Ziegler, *Die Königsgleichnisse des Midrasch* (1903), 147 f.

scribed by written law, and there were continuous quarrels between merchants and tax-farmers so that the town had to publish a new customs tariff. Duty had to be paid on frankincense, myrrh and other valuable commodities of the caravan trade,<sup>51</sup> papyrus,<sup>52</sup> water, money, pearls and jewels,<sup>53</sup> slaves,<sup>54</sup> beasts both wild and domestic,<sup>55</sup> hides, metals, statues, wool, pine nuts, corn, oil, wine, lard, dried fish and fodder. There was usually no tax imposed on privileged and distinguished persons, on the members and slaves of a family<sup>56</sup> or on clothes worn at the time.<sup>57</sup> There existed transit duties on travelling and on the freight of camels, donkeys and other animals; these might be remitted for religious festivals and the markets connected with them, at which time the people who wished to be exempt had to wear a wreath or some other religious emblem.<sup>58</sup> If duty had been paid for some articles, either a customs knot<sup>59</sup> or a customs label bearing at least two letters was affixed.<sup>60</sup> Defrauding the customs was punishable with death,<sup>61</sup> and cattle on which duty had not been paid were confiscated.<sup>62</sup> Nevertheless, many people managed to elude the customs.<sup>63</sup>

<sup>51</sup> Plin., XII, 32; 63-65; *C. I. S.*, II, 3, I, nr. 3913.

<sup>52</sup> *M. Shabb.* VIII 2; *Bab. Shabb.* 78b.

<sup>53</sup> *M. Kelim* XVII 16.

<sup>54</sup> *C. I. S.*, II, 3, I, nr. 3913; *Bab. Baba Bathra* 127b; Philostr., *Apoll.*, I, 20: "And as they fared on into Mesopotamia, the tax-gatherer who presided over Zeugma led them into the registry and asked them what they were taking out of the country with them. And Apollonius replied: 'I am taking with me temperance, justice, virtue, continence, valour, discipline.' And in this way he strung together a number of feminine nouns or names. The other, already scenting his own perquisites, said: 'You must then write down in the register these female slaves.' Apollonius answered: 'Impossible, for they are not female slaves that I am taking out with me, but ladies of quality.'"

<sup>55</sup> *C. I. S.*, loc. cit.; *M. Baba Quamma* X 2: "If tax-gatherers took a man's ass and gave him another or if robbers robbed a man of his coat and gave him another, they become his own, since the owner cherishes no hope of recovering them." See also *Dig.*, XXXIX, 4, 16 § 7.

<sup>56</sup> *Bab. Baba Bathra* 127b; Philostr., *Apoll.*, I, 20; *Syria*, XV (1934), 33 f.

<sup>57</sup> *M. Kilaim* IX 2: "Diverse kinds (of garments) may not be worn even over ten (other garments), to escape customs dues." *Bab. Baba Quamma* 113a.

<sup>58</sup> *C. I. S.*, loc. cit.; *Bab. Aboda Zara* 13a (tradition of the second century A. D.); *Bab. Shabb.* 33b; Goldschmid, 201.

<sup>59</sup> *Bab. Aboda Zara* 39a = *Bab. Bekhor.* 44b.

<sup>60</sup> *M. Shabb.* VIII 2; *Bab. Shabb.* 78b; Goldschmid, 201.

<sup>61</sup> *Bab. Sanh.* 44b; for pawns in such cases see *C. I. S.*, loc. cit.

<sup>62</sup> *Bab. Baba Quamma* 114a.

<sup>63</sup> Goldschmid, 202, 216; *M. Kelim* XVII 16/7; *M. Kilaim* IX 2; *Bab. Baba Bathra* 127b.

Two official customs tariffs from the Roman Near East are preserved.<sup>64</sup> One was found at Suweida in Transjordan and states that a silver obol (most probably the maa of the Talmud) was the duty payable on an article valued at 100 denarii.<sup>65</sup> More famous is an elaborate customs tariff from Palmyra, of which we have Greek and Aramaic fragments giving in combination nearly the whole of the original. The duties were collected by tax-farmers of the autonomous town of Palmyra, but under Roman administrative control. Italian wool seems to have been exempt from both import and export duties. On food-stuffs like oil, dried fish, corn, wine, fodder, etc., which were important for the needs of the population, as much duty had to be paid on re-exportation as had been paid on their importation into the district. This remarkable measure was intended to induce the caravan traders to retain such products for sale in Palmyra.

Often there were extra duties payable on special occasions; these were more burdensome than the regular taxes as they could not be anticipated. For instance, we hear of a war contribution under Hadrian<sup>66</sup> and on several occasions of the *aurum coronarium*, an *ad hoc* tax in money.<sup>67</sup> In the late second or early third century A. D. the town of Tiberias had to pay an unusually heavy *aurum coronarium*; and when some of the inhabitants fled to avoid payment, the onus of payment fell upon those who were left. Then, the Talmud tells us, all citizens of Tiberias began to flee, and the tax (which was probably levied on account of the Parthian campaigns of Marcus Aurelius or Septimius Severus) had to be given up.<sup>68</sup> Another *ad hoc* tax was the *annona* known as *militaris*,<sup>69</sup> a levy in kind with occasional provisions for an *adaeratio*; this *annona militaris* had to supply, especially during the third century A. D., the changing but usually exorbitant needs

<sup>64</sup> For the Talmud see Goldschmid, 202; *Bab. Nedarim* 28b; *Bab. Baba Quamma* 113a. See also *Dig.*, XXXIX, 4, 16 § 7.

<sup>65</sup> Cagnat, *I. G. R. R.*, III, 1283 (Suweida): "The tax-farmer shall take one silver obol for (merchandise of the value of) hundred denarii."

<sup>66</sup> Cass. Dio, LXIX, 12; Marquard, *Römische Staatsverwaltung* (second ed.), 254; M. Rostovtzeff, *S. E. H. R. E.*, chapter IX note 56.

<sup>67</sup> *R.-E.*, Art. s. v.; Marquard, *op. cit.*, Index s. v.; L. Goldschmid, 197; *Bab. Baba Bathra* 18a; 143a; I. Ziegler, *Die Königsgleichnisse des Midrasch* (1903), 5 f., 55 f., 117 f.

<sup>68</sup> *Bab. Baba Bathra* 8a; A. Büchler, *Jews' Coll. Publ.*, I (1909), 39.

<sup>69</sup> *R.-E.*, Art. *annona militaris*; E. Stein, *Geschichte des spätrömischen Reiches*, I (1928), 62; *Econ. Survey*, II, 546 f.; Abbott-Johnson, *op. cit.*, 129 f.

of the Roman garrisons and of the Roman administration. In the second half of the third century A. D. the *annona militaris* was the most important tax levied in the Roman Empire and from the time of Diocletian it became a regular tax under the new name of *iugatio*. The Talmud and Midrash refer to the early and to the late *annona* in a remarkable number of passages<sup>70</sup> which clearly show how very often this pernicious and, as a rule, unjust tax was levied during the third century A. D. Not only corn but also cattle had to be given as *annona militaris*,<sup>71</sup> and the Jewish authorities had to submit to the delivery of the *annona* of bread to the Roman officials on the sabbath.<sup>72</sup> The legate of Syria in the third century A. D. had expressly to confirm to a certain village its exemption from the usual *συνεισφοραὶ* of the Roman officials, and his communication was commemorated in stone.<sup>73</sup>

Cagnat, *I. G. R. R.*, III, 1119 — *O. G. I. S.*, 609.

Phaenae.

"Julius Saturninus to the inhabitants of Phaenae, the mother-village of the Trachonitis, greetings. If a soldier or a private person should attempt to find quarters amongst you by violence, let me know and you shall be defended. It is neither your duty to pay an additional tax (*συνεισφορά*) to foreigners nor can you be compelled to house foreigners as you have special quarters for them. Please put up this letter of mine in a prominent place of your mother-village, so that no one may have the excuse of ignorance."

Other heavy burdens imposed on the people in the Roman Near East were *leitourgiai* and *angaria*, which had to be performed for the *cursus publicus* of the Empire.<sup>74</sup> Simon of Cyrene had to carry the

<sup>70</sup> S. Krauss, *Lehnwörter*, II, 133 s. v.; Goldschmid, *loc. cit.*, 178, 206 f.; I. Ziegler, *Die Königsgleichnisse des Midrasch* (1903), 168 f.

<sup>71</sup> *Bab. Pesach*. 6a. See also Ziegler, *op. cit.*, 142 f.

<sup>72</sup> *Pal. Shebiith* IV 2. See also *Pal. Shebiith* IV 35; *Pal. Sanh.* III 21.

<sup>73</sup> See also G. M. Harper, *Yale Class. Stud.*, I (1928), 158 f.

<sup>74</sup> *E.-W.*, Art. *cursus publicus*, manus; E. Stein, *op. cit.*, I, 24, 58, 71 f.; E. H. Holmberg, *Zur Geschichte des Cursus Publicus*, phil. diss. Uppsala (1933); M. P. Charlesworth, in *Journ. Rom. Stud.*, XXV (1935), 106 f.; H. Dessau, *Geschichte der röm. Kaiserzeit*, II, 2 (1930), 429, Index s. v. Post; S. Klein, *Monatsschrift Gesch. Wiss. Jud.*, LXXVIII (1934), 165 f.; 168 f.; *Encyclopaedia Judaica*, Art. Abgabe, Angaria; A. Büchler, *Jews' Coll. Publ.*, I (1909), 8 f., 39 f., 42; IV (1912), 62; A. Büchler, *Der galiläische Amhaarez* (1906), 213/4; S. Krauss, *Lehnwörter*, II, 63; Goldschmid, *loc. cit.*, 207 f.; Abbott-Johnson, *op. cit.*, chapter VIII. See *Bab. Nedarim* 32a; *Bab. Sanh.* 101b; *Bab. Sota* 10a; *Bab. Baba Bathra* 47a; *Bab. Berakh.* 56a. For *σραβούχοι* of Dura see *Dura Report*, VI, 177.

cross of Jesus as an *ἀγγαπέλα*,<sup>75</sup> and an *angaros*, i. e. a liturgical courier, is mentioned in Dura Pg. 20 from Edessa.<sup>76</sup> *Leitourgiai* and *angaria* of the periods of the Principate as well as of the later period are very frequently mentioned in the Talmud and Midrash. It was permissible to commandeer any animal required for the *cursus publicus*,<sup>77</sup> and great estate owners and their officials in the country<sup>78</sup> as well as the *curiales* and *decemprimi* in the towns could get themselves appointed, permanently or temporarily, in their districts either to perform certain *leitourgiai* and *angaria* for themselves or to see that the work was done by others; in either case they were entirely responsible for the due performance on pain of forfeiture of their property. The office was so troublesome that from the second century A. D. Talmudic authorities gave Jews permission to emigrate from Palestine to avoid it, and an authority of the following century went so far as to advise them to flee when nominated for the *boule*.<sup>79</sup> Under Antoninus Pius and probably some other emperors (Talmudic) scholars were exempt from *leitourgiai* and *angaria*; but there is evidence of not a few departures from this practice.<sup>80</sup>

*Syria*, XV (1934), 33 f.

39-34 B. C.

Probably found at  
Rhosos in North Syria.

"The Emperor Caesar, son of the divine Julius, imperator for the fourth time, designated consul for the second and third time, to the magistrates, the council and the assembly of Rhosos, the sacred inviolable and autonomous town, greetings. I and my army are in excellent health. Here is included an extract translated from a stone tablet which is in the Capitol at Rome. You must register it in your public archives. Send a copy of it also to the council and to the assembly of Tarsus, to the council and to the assembly of Antioch, to the council and to the assembly of . . . (?) for them to register it. Farewell.

<sup>75</sup> M. Rostovtzeff, *Klio*, VI (1906), 251.

<sup>76</sup> A. R. Bellinger, *Yale Class. Stud.*, V (1935), 138 f. See chapt. II § III note 18.

<sup>77</sup> M. Baba Mezia VI 3 (second century A. D.): "If one hires an ass, and it is . . . seized as an *angaria* (he is not bound to supply another in its stead)." *Bab. Baba Mezia* 78b (third century); *Pal. Baba Mezia* VI 33.

<sup>78</sup> *Bab. Joma* 35b; Büchler, *Jews' Coll. Publ.*, I, 8 f., 39 f.; *S. E. G.*, VII, 1082.

<sup>79</sup> See *Pal. Moed Katan* 2, 3; *Pal. Kiddush*. 1, 2; *Pal. Baba Bathra* 9, 4; *Bab. Nedarim* 32a; A. Büchler, *Der galiläische Amhaarez* (1906), 237 f. See also note 25 and *Pal. Sanh.* 8, 2; *Pal. Pea* 1, 1; 1, 2; *Pal. Berakh.* 1, 1; *Bab. Berakh.* 9b; A. Büchler, *Jews' Coll. Publ.*, I, 39 f.

<sup>80</sup> Abbott-Johnson, *op. cit.*, 109 f.; S. Klein, *loc. cit.*; A. Marmorstein, *Rev. Et. Juives*, LXVI (1913), 44 f.; LXXVII (1923), 166 f.; *Bab. Nedar.* 32a; *Pal. Berakh.* 1, 1; *Bab. Berakh.* 9b.

The Emperor Caesar, triumvir for the reestablishment of the republic according to the *lex Munatia* and *Aemilia* has given the (Roman) citizenship total immunity from taxes in the following terms:

Seeing that Seleucus, son of Theodotus of Rhosos, has made a campaign with us . . . we give to him, his parents, his children, his descendants, and to the wife who is living with him the (Roman) citizenship and total immunity (from taxes) which those enjoy who are (Roman) citizens, i. e. exemption from taxes according to the best possible law and right; and they shall be exempt from military service and all public burdens. . . .

Inasmuch as the above mentioned, as well as his wife, his parents, his children and his descendants, before being Roman citizens were exempt from taxes . . . , if he, after having become Roman citizen exempt from taxes, wishes to take advantage of that, he will be able to do so and may keep the priestships, . . . , the honours and the privileges . . . which he possessed and may enjoy them like everyone who possesses and enjoys them according to the best possible law and right.

(Seleucus and his family shall be free from the intervention of) any tax-collector and tax-farmer . . . (and shall not be compelled to give) quarters (to officials) or winter quarters (to the troops). . . .

(As regards) a town or a region in the provinces of Asia and Europe . . . , (if he) imports or exports for his own needs from or to a town or a region . . . (if he) exports his own products and such of his flocks for his own needs . . . , on all these things no town and no tax-farmer shall have the right to impose a duty. . . .

Every town or every official who . . . acts contrary to the above written regulations . . . shall pay a fine of a hundred thousand sesterii to the *populus Romanus*. . . ."

The Syrian village which we mentioned above was also exempt from such duties.

The revenues obtained by the Roman state through irregular and often illegal requisitions of its representatives must have been immense, and cases of actual bribery must have occurred very frequently in the Roman Near East. Josephus and other authors make considerable mention of this unfortunate side of Roman state administration in so far as it concerned Palestine up to the Jewish rebellions.<sup>21</sup> It is well

<sup>21</sup> Cicero, *Pro Flacco* § 69; Philo, *Leg. ad Gaium*, chapter 23; Dio Cass., XLVIII, 41; Joseph., *Ant.*, XIV, 2, 3, 30/1; 3, 1, 34, 35, 39; 4, 1, 55; 4, 4, 72; 7, 1, 105; 5, 1, 80; 6, 2, 99; 6, 3, 102; 8, 5, 147; 9, 3, 164; 9, 5, 180; 11, 2/3, 272-279; 12, 1, 279; 12, 2, 303; 14, 4, 382; 14, 6, 392/3; 15, 1, 395; 15, 3, 406 f.; 15, 7, 435; 16, 3, 484/6; 16, 4, 490; XV, 1, 2, 5; 3, 8, 75; 6, 7, 196-201; XVI, 2, 1/2, 12-16; 2, 2, 16 f.; 4, 5, 128/9; XVII, 6, 1, 146 f.; 8, 1, 189 f.; 9, 3, 221 f.; 10, 1, 252 f.; 12, 1, 321 f.; XVIII, 1, 1, 2; 3, 2, 60 f.; 4, 5, 102; 4, 5, 104/5; 8, 7, 289 f.; Bell.

known that it is due entirely to gaps in the extant records that only the most gross cases of illegal requisition and bribery in Syria and Transjordan have come to our notice.<sup>82</sup> Before and after Augustus large fortunes must have been made out of the sufferings of the unhappy East. The Talmud and Midrash also refer in earlier and later traditions to such happenings, but not in such a way that they can with any certainty be associated with definite historical situations.<sup>83</sup>

### iii. *Public Works. Military Accounts*

The public works in the Roman Near East which were completed by the Roman government were very extensive and many have survived in a ruinous state. We have already mentioned the buildings erected for public amusements, the roads, canals, cisterns and harbour works; the state also undertook large temple constructions,<sup>1</sup> many barracks for its troops, homesteads for the veterans, and extensive but necessary fortifications.<sup>2</sup> Despite the assistance afforded by the *leitourgiai* the buildings erected by the state must have resulted in considerable expense; the control of the workmen in such projects was in

f, 6, 3, 128; 6, 4, 131/2; 6, 6, 139; 8, 1, 159; 8, 7, 175; 8, 8, 179; 11, 2, 220/4; 12, 2, 242; 15, 2, 288; 15, 3, 297-302; 18, 4, 358; 20, 3, 393/5; 28, 1, 334; 32, 7, 646; II, 2, 2, 16-19; 3, 1, 411 f.; 14, 6, 293; Plut., *Ant.*, 36.

<sup>82</sup> Plut., *Crass.*, 17 (Crassus in Bambyce); Joseph., XV, 4, 1/2, 88-96 (Pompey and Tripolis); XIV, 5, 1, 81 = *Bell.*, I, 8, 4, 166 (Pompey and Aretas); *Ant.*, XVI, 9, 4, 295/6 (Augustus and the Arabs); *Bell.* I, 11, 2, 220/4 (Cassius and Apamea); Vell. Pat., II, 117 (Varus in Syria); S. H. A., *Avid. Cass.*, VIII 5; *Pertin.* III 2; IX 6 (P. Helvius Pertinax in Syria). See also *Syria*, XV (1934), 33 f. (penalty of 100,000 *sestertii*, *στέπαρος* from Rhosos). See also F. Cumont, *L'Antiquité Classique*, IV (1935), 191 f.

<sup>83</sup> I. Ziegler, *Die Königsgleichnisse des Midrasch* (1903), 55 f., 117 f. and especially 123, 142 f., 150 f.

<sup>1</sup> For such state buildings see *R.-E.*, Art. Petra, 1177; Malal., IX-XIII, *passim*; Jalabert-Mouterde, *Inscriptions Grecques et Latines de la Syrie*, nr. 39-44; 66; *O. G. I. S.*, 614 = Cagnat, 1289. See also *Bab. Shab.* 33b; M. Aboda Zara I 7 (Public baths, roads and bridges); I. Ziegler, *Der Königsgleichnisse des Midrasch* (1903), 41 f., 124, chapter VII, *passim*; A. Schenk von Stauffenberg, *Die römische Kaiser-geschichte bei Malalas* (1931), Index s. v. Antiochien, Caesarea, Daphne, Emesa, Laodikeia. See also chapt. I § II; chapt. II § VI; chapt. III § I notes 53-57; § III note 17.

<sup>2</sup> *R.-E.*, Art. Legio, 1242, 1247; Limes 650 f., 654 f.; Mesopotamien, 1162 f.; Numerus; Syria; A. Poidebard, *La trace de Rome dans le désert de Syrie* (1932); A. Poidebard, *Mélanges d'Arch. et d'Histoire*, LIV (1937), 5 f.; M. Rostovtzeff, *Münch. Beitr. zur Papyrusforschung*, XIX (1934), 351 f.; *Dura Recp.*, VI, 4 f., 172 f., 265 f.



the hands of overseers.<sup>3</sup> There were various periods in which the state as builder was especially eminent: Augustus and his friends and his allies like Herod were the first to take in hand remarkable public works.<sup>4</sup> The reigns of Trajan and Hadrian in particular were noted for the construction of military buildings, roads, canals, and ports; many towns were founded in Transjordan and Palestine by these emperors.<sup>5</sup> Septimius Severus and his dynasty spent much money in adorning the towns of Syria which had been friendly to them and in reconstructing the frontier fortifications.<sup>6</sup> A new but not the last period of increased state activity in building dawned under the Emperors Diocletian and Constantine; of necessity it fell to their lot to rebuild and restore monuments and fortifications and to undertake other tasks which their predecessors would have been able to leave to private or municipal enterprise.<sup>7</sup>

Of the economic conditions prevailing among the soldiers serving in Syria we have not so much information as of those in Egypt. There are inscriptions showing that they could acquire wealth, especially if promoted to a higher rank; and we learn also from the Talmud and Midrash that the Roman soldier<sup>8</sup> and in particular the cen-

<sup>3</sup> Cagnat, 1075 = *O. G. I. S.*, 611. See also § II notes 74-80.

<sup>4</sup> A. H. M. Jones, in *Journ. Rom. Stud.*, XXI (1931), 79 f., 266 f.; A. H. M. Jones, *Cities of the Eastern Roman Provinces* (1937), 273 f., 283 f.; Th. Wiegand, *Baalbek*, II (1923), 140; *R.-E.*, Art. Herodes (Suppl. II, 74 f., 101), Legio, 1242; F. J. Hollis, *The Archaeology of Herod's Temple* (1934); Malal., 222-225; A. Schenk von Stauffenberg, *op. cit.*, 445 f., 461 f., 477, 493, 498.

<sup>5</sup> A. H. M. Jones, *op. cit.*, 278 f., 293 f.; *R.-E.*, Art. Petra, 1177; Hollis, *op. cit.*, 61; A. H. M. Jones, *Journ. Rom. Stud.*, 82 f.; M. Rostovtzeff, *S. E. H. R. E.*, chapter V note 2; P. L. Strack, *Die Reichsprägung zur Zeit des Hadrian* (1933), 162 f.; W. Weber, *Hadrian* (1907), 121 f., 231 f.; Malal., 275-281; A. Schenk von Stauffenberg, *op. cit.*, 450 f., 464, 471 f., 475, 477, 480, 483, 489, 491 f., 494, 498, 509.

<sup>6</sup> Jalabert-Mouterde, *op. cit.*, nr. 39-44; F. Schehl, *Hermes*, LXV (1930), 193 f.; W. Hüttl, *Antoninus Pius*, I (1936), 236, 290 f.; J. Hasebroek, *Untersuchungen zur Geschichte des Kaisers Septimius Severus* (1921), 132; M. Rostovtzeff, *op. cit.*, chapter IX note 17; A. H. M. Jones, *op. cit.*, 267 f., 280 f., 283, 289, 294; *R.-E.*, Art. Mesopotamien, 1160 f.; Petra, 1177; A. H. M. Jones, *Journ. Rom. Stud.*, 82, 85; Bouchier, 89 f.; Malal., 282; 294; A. Schenk von Stauffenberg, *op. cit.*, 453, 488, 495, 497, 498 f.

<sup>7</sup> *R.-E.*, Art. Syria, 1679 f., 1693 f.; A. H. M. Jones, *op. cit.*, 281, 286 f.; *id.*, in *Journ. Rom. Stud.*, 83 f., 271 f., 273 f.; *S. E. G.*, VII, 256; Malal., 306-308, 310, 318, 323; A. Schenk von Stauffenberg, *op. cit.*, 454 f., 458 f., 485 f., 489 f., 497.

<sup>8</sup> Cagnat, Index, p. 621 f.; *S. E. G.*, VII, Index, p. 178; I. Ziegler, *Die Königs. des Midrasch* (1903), p. 2, chapter II *passim*; S. Krauss, *Lehnwörter*, II (1899), Index, p. 628 f. and especially 631 f.; *O. I. S.*, II, 3, I, nr. 3944, 3946, 3947; *O. G. I. S.*, 615, 628, 639, 643, 648; Jalabert-Mouterde, 83, 140, 178-181.

turion<sup>9</sup> was respected and feared. On these points some military documents in Latin from Dura, not yet fully published, will shed important light:<sup>10</sup> they contain a military calendar, the *acta cotidiana* or *obsequia* of the twentieth Palmyrene cohort in Dura, giving the daily numbers of the troops and mentioning the soldiers on furlough. The documents also give a list of the cavalry horses of the cohort, of soldiers and of N. C. O.'s, *sententiae* of *tribuni militum*, and finally several letters.

#### iv. Temple Accounts

We are comparatively well informed about the economy of the temple of Jerusalem,<sup>1</sup> but we cannot attempt to deal with the more doubtful and uncertain questions connected with it. There was a traditional tithe amounting to half a shekel (= 2 denarii) as well as several additional tithes in kind which all Jews had to pay. The *schulchanim*, the Jewish bankers mentioned before, collected the payments in money from all districts, together with a "collybon" as their commission, and transferred the sums thus collected to Jerusalem.<sup>2</sup> The temple had thus wealth enough to incur very heavy expenses for sacrifices, for restoration of buildings, for the equipment of the temple and for wages and salaries.<sup>3</sup> Large bequests and endowments, however, from Jews and even from non-Jews brought in every year sub-

<sup>9</sup> See *Act. Apost.*, X, 1 f.; Cagnat, 1004, 1005, 1016, 1017, 1046, 1113, 1114, 1116, 1117, 1118, 1120, 1121, 1122, 1128, 1179, 1230, 1242, 1328; *S. E. G.*, VII, 983, 1100; VIII, 345, 346; I. Ziegler, *Die Königs. des Midrasch* (1903) 77; Krauss, *Lehnwörter*, 529; *C. I. S.*, II, 3, I, 3962.

<sup>10</sup> *Dura Rep.*, V, 295 f.; Rostovtzeff, *Münchener Beiträge zur Papyruskunde und antiken Rechtsgeschichte*, XIX (1934), 351 f.; M. Rostovtzeff, *Comptes Rendus* (1933), 309 f.; A. S. Hoey, *Harvard Theol. Rev.*, XXX (1937), 15 f.

<sup>1</sup> S. Klein, *Monatsschr. Gesch. Wiss. Jud.*, LXXVII (1933), 180 f.; S. W. Baron, *Social and Religious History of the Jews* (1937), 193, 200, III 50 f.; F. I. Hollis, *The Archaeology of Herod's Temple* (1934); E. Schürer, *Geschichte des jüdischen Volkes* (fourth ed.), § 24 *passim*; A. Schwartz, "Die Schatzkammer des Tempels in Jerusalem," *Monatsschrift Ges. Wiss. Jud.*, LXIII (1919), 227 f.

<sup>2</sup> S. Ejges, *Das Geld im Talmud*, phil. diss. Giessen (1930), 87 f. Schürer, *op. cit.*, § 24 II; Philo, *De monarch.*, II § 3; M. Halla *passim*; M. Maas, *Sohen. passim*, etc. For payment of tithes after the destruction of the temple see Baron, *op. cit.*, I, 243 f. See also chapt. III § V.

<sup>3</sup> Ejges, 92 f.; M. Joma *passim*; Bab. Joma *passim*; Schürer, *op. cit.*, § 24, III, IV; Baron, *op. cit.*, I, 193, 200; III, 50 f. See also chapt. II § VII; chapt. III § I note 98.

stantial sums,<sup>4</sup> and the imperial *fiscus* also made contributions.<sup>5</sup> The temple had a number of stores; and there were also *thesauri* to contain the coins of varying denominations which were paid into them.<sup>6</sup> Only part of the temple expenses were paid directly by these *thesauri*, and the payment of wages and other expenses was often put into the hands of the bankers known as *schulchanim*.<sup>7</sup> These men as a rule did not receive in advance the sums they paid out, but for a commission advanced them at their own risk before the stipulated date.<sup>8</sup> We also know of very considerable endowments for synagogues.<sup>9</sup> We have to assume also that the pagan temples did not differ in their economy very much from the Jewish temple. Thus we hear of large sums passing to the temple of the Dea Syria in Bambyce from Babylonia, Cappadocia, Arabia and Phoenicia<sup>10</sup> as well as of considerable endowments in Gerasa,<sup>11</sup> Palmyra,<sup>12</sup> Dura<sup>13</sup> and elsewhere.<sup>14</sup> The trade monopoly in the district of the temple of Baitokaike has been mentioned previously. Not only was it customary for the various temple officials to erect their own buildings out of the income of the temples<sup>15</sup> but even other structures and edifices of general use, such as aqueducts, oil presses and private houses.<sup>16</sup>

<sup>4</sup> M. Joma III 10; *Encyclopaedia Judaica*, Art. Adiabene; Philo, *Legat. ad Gaium* § 37; Joseph., *Ant.*, XIV, 16, 4, 488 (Sosius); XVI, 2, 1, 14 (Marcus Agrippa); XVIII, 5, 3, 122 (Vitellius); M. *Middoth* III 8 fin; Joseph., *Bell.*, V, 5, 3, 205; 13, 6, 562; M. P. Charlesworth, *Five Men* (1936), 18 f.

<sup>5</sup> Baron, 188; Joseph., *Bell.*, V, 13, 6, 562/3; Philo, *Legat. ad Gaium* §§ 23, 40.

<sup>6</sup> Ejges, 93; Hollis, *Index s. v. treasuries*; M. *Shekal.* VI 5; Joseph., *Ant.*, XIV, 4, 4, 72; XIX, 6, 1, 294; *Bell.*, I, 7, 6, 152 f.; V, 13, 6, 565; VI, 5, 2, 282; 8, 3, 390/1; Schürer, § 24, III.

<sup>7</sup> *Pal. Shekalim* IV 1, 48a; Ejges, 92 f.      <sup>8</sup> Ejges, 92 f.

<sup>9</sup> See for instance S. A. Cook, *Pal. Epiph. Quart. Stat.*, LII (1920), 82 f.; A. Marmorstein, *loc. cit.*, 139 f.; H. Vincent, *Rev. Bibl.*, XVI (1919), 532 f.; C. C. Torrey, *Journ. Am. Orient. Soc.*, XL (1920), 141 f.; *S. E. G.*, VII, 257a; VIII, 2, 4, 170; Gallinger, *Bibl. Reallex.*, Art. Synagoge; E. T. Sukenik, *Ancient Synagogues of Palestine and Greece* (1934); Baron, *op. cit.*, III, 39.

<sup>10</sup> Lucian, *De Dea Syria*, 10; 16; *R. E.*, Art. Dea Syria.

<sup>11</sup> R. O. Fink, *Journ. Rom. Stud.*, XXIII (1933), 114; C. C. McCown, *Journ. Pal. Orient. Soc.*, XVI (1936), 72 f.; *S. E. G.*, VII, 376, 377, 893, 894; Cagnat, 1344; 1355; 1351 = *O. G. I. S.*, 622.

<sup>12</sup> *O. I. S.*, II, 3, I, *passim* and especially nr. 3923; 3934; J. Cantineau, *Syria*, XVII (1936), 268 f.

<sup>13</sup> Rostovtzeff, *Comptes Rendus* (1937), 203/4, 206; *S. E. G.*, II, 776.

<sup>14</sup> See for instance Cagnat, 1096; *O. I. L.*, III, 6671; *S. E. G.*, II, 776; G. M. Harper, *Yale Class. Stud.*, I (1928), 123 f., 142 f.; B. Laum, *Stiftungen in der griechischen und römischen Antike* (1914), nr. 210 (= *O. G. I. S.*, 383); *S. E. G.*, VIII, 32.

<sup>15</sup> See for instance Cagnat, 1096, 1293, 1314.

<sup>16</sup> Cagnat, 1009, 1137; *S. E. G.*, VII, 216. See chapt. I § II note 10.

v. *Municipal Accounts*

Just as we know little of the economic situation of the Roman army in Syria so we can form only a very vague idea of municipal economy in the Roman Near East.<sup>1</sup> A large part of the income of the towns and villages was derived from bequests, about which we have many references from Palmyra,<sup>2</sup> Antioch,<sup>3</sup> and other towns.<sup>4</sup> In addition, the famous customs tariff from Palmyra tells us something about the income of this unusual desert and caravan town, but we must assume that the *poleis* of the Roman Near East could not all rely on customs, excises and similar duties<sup>5</sup> for their main income as Palmyra probably did. Talmudic passages of the second and third centuries A. D. show us how the restoration of city walls was paid for: originally only householders had to make a contribution but later all citizens according to the capital they were estimated to possess. Immigrants were, as a rule, assessable for taxation in the towns after a twelve months' stay; if they bought a house they were assessed at once. It was only during certain periods that scholars were exempt.<sup>6</sup> The normal expenses of the towns have for the most part been mentioned in earlier parts of this survey: the numerous festivals and amusements, the expenses of education and especially the requisitions and payments due to the Roman state and to its officials amounted to large sums. Furthermore, the towns spent lavish sums to honour both citizens and foreigners alike, as numerous monuments and inscriptions testify.<sup>7</sup>

<sup>1</sup> For the whole problem see W. Liebenam, *Städteverwaltung im römischen Kaiserreiche* (1900), *passim*; F. F. Abbott-A. C. Johnson, *Municipal Administration in the Roman Empire* (1926), *passim*.

<sup>2</sup> *C. I. S.*, II, 3, I, *passim* and especially 3927; 3934 = Cagnat, 1047; 3932 = Cagnat, 1033 = *O. G. I. S.*, 640; Cagnat, 1013, 1045, 1235; *O. I. S.*, 3959.

<sup>3</sup> See chapter II § VI note 2; A. Schenk von Stauffenberg, *Die römische Kaiser-geschichte bei Malalas* (1931), Index s. v. Antiochien, Caesarea, Daphne, Emesa, Laodikeia; B. Laum, *Stiftungen in der griechischen und römischen Antike* (1914), nr. 208 = Malal., 294.

<sup>4</sup> See chapter II § VI notes 3-6; *S. E. G.*, VII, 255, 843, 847, 849, 852, 858; *O. G. I. S.*, 614 = Cagnat, 1287; for villages see G. M. Harper, *Yale Class. Stud.*, I (1928), 149 f.; *S. E. G.*, VII, 71; M. P. Charlesworth, *Five Men* (1936), 21.

<sup>5</sup> For such municipal taxes and duties see § II notes 33, 42-44.

<sup>6</sup> *M. Baba Bathra* I 5; *Bab. Baba Bathra* 7 b. See also § II note 33.

<sup>7</sup> See for instance Cagnat, 1013-1015, 1017/8, 1033, 1038, 1041, 1045-1047, 1049, 1054, 1077, 1102, 1196, 1201, 1213, 1353, 1354, 1357; *O. G. I. S.*, 586, 587, 603, 624, 625, 640, 646; *C. I. S.*, II, 3, I, nr. 3914, 3915, 3919, 3921, 3923, 3927, 3930-3932, 3934-3936, 3938, 3942, 3952, 3959; J. Cantineau, *Syria*, XVII (1936), 277 f.; *S. E. G.*,

The financial officials of the towns carried out their duties more or less autonomously, but were under the control of the Roman administration; this condition is especially known from Palmyra<sup>a</sup> and Antioch.

*C. I. S.*, II, 3, I, 3913.

18th April, 137 A. D.

Palmyra.

(Greek and Aramaic): "In the reign of Trajanus Hadrianus Augustus, son of the God Caesar Trajanus Parthicus, grandson of the God Nerva, pontifex maximus, tribunus plebis 21 times, imperator twice, consul three times, father of the fatherland, in the second consulship of L. Aelius Caesar and (in the consulship of) P. Coelius Balbinus.

Decree of the *boule* on the eighteenth day of the month of Nisan, in the year 448 (18th April, 137 A. D.). Under the chairmanship of Bonneus, son of Bonneus and grandson of Airanos, with Alexander, son of Alexander son of Philopator, acting as scribe of the *boule* and the *demos*, in the archonship of Malichus, son of Olaious son of Mocimus, and Zebeides, son of Nesas. The following decree was passed by the *boule* according to regular procedure. Since in the past very many of the dues have not been included in the duties and excise regulations but have only been exacted according to custom (as it was stipulated in the tax-farmers' contracts that they should collect their taxes in accordance with law and also with custom), and since it frequently happened that quarrels arose over such demands between the merchants and the tax-farmers, it was resolved that the existing archons and *decem primi* should define the dues not included in the law and should inscribe them in the next contract and should stipulate for each class of goods the customary dues; and after they have been approved by the tax-farmer, they should inscribe them together with the earlier law on the stone wall opposite the temple which is called Rabaseire. And the archons, *decem primi* and *syndici* in office at the time should see to it that no tax-farmer should exact more (than is stipulated).

For each wagon-load of any sort the dues upon 4 camel-loads are to be exacted.

*The duties regulations of the customs district of Hadriana Palmyra  
and of the wells of Aelius Caesar:*

From those who bring slaves into Palmyra or within its borders the tax-farmer is to exact 22 denarii per head; for a slave who is sold in the town and shall not (?) be exported 12 denarii; for a slave of more than one

I, 529, 552, 553; VII, 74, 133-141, 152, 223, 224, 332, 333, 813-824, 826, 844, 859. For other expenses see G. M. Harper, *Yale Class. Stud.*, I (1928), 123 f., 142 f., 152 f. (expenses of villages for buildings); *S. E. G.*, I, 545; VII, 380; Cagnat, 1273-1277, 1284, 1285, 1317, 1318, 1325. See also chapt. I § II; chapt. II §§ V, VI; chapt. IV § II.

<sup>a</sup> *C. I. S.*, II, 3, I, 3913 = *O. G. I. S.*, 629; H. Dessau, *Geschichte der römischen Kaiserzeit*, II, 2 (1930), 626 f. See also chapt. II § IV note 49.

year's service who is for sale 10 denarii; for exported slaves 12 denarii per head.

Furthermore, in the case of 1 camel-load of dry goods, the tax-farmer shall exact 3 denarii for 1 imported camel-load, 3 denarii for 1 exported camel-load, 2 denarii for 1 imported or exported donkey-load.

In the case of purple wool he shall exact 8 assars for each imported and also for each exported fleece.

For each imported camel-load of myrrh in alabaster vessels he shall exact 25 denarii; for each exported load of myrrh (?) 13 denarii. For each imported camel-load of myrrh in goat skins he shall exact 13 denarii; and for each exported load 7 denarii. For each imported donkey-load of myrrh in alabaster vessels he shall exact 13 denarii, and for each exported load 7 denarii. For each imported donkey-load of myrrh in goat skins he shall exact 7 denarii, and on export 4 denarii.

For each imported camel-load of olive oil in four goat skins 13 denarii, and on export 13 denarii. For each imported camel-load of olive oil in two goat skins he shall exact 7 denarii, and on export 7 denarii. For each imported donkey-load of olive oil he shall exact 7 denarii, and on export 7 denarii.

For each imported camel-load of lard (or some other fat?) in four goat skins he shall exact 13 denarii, and on export 13 denarii. For each imported camel-load of lard in two goat skins he shall exact 7 denarii, and on export 7 denarii. For each imported donkey-load of lard he shall exact 7 denarii, and on export 7 denarii.

For each imported camel-load of dried fish 10 denarii, and on export (10 denarii?) for each camel-load. For each imported donkey-load of dried fish the tax-farmer shall exact (3 denarii?), and on export 3 denarii.

For an imported horse (?) 10 denarii, for an imported mule (10 denarii), for an imported . . . 2 assars, for sheep on import or export 1 assar, for a . . . camel 3 assars, for a great . . . 2 assars, for a . . . 1 assar. . .

The tax-farmer shall receive from the myrrh sellers 2 assars per month.

Further, the tax-farmer shall exact on each woman who fetches 1 denarius or more 1 denarius per woman, and on each woman who fetches 8 assars, he shall exact 8 assars, and from each woman who fetches 6 assars, he shall exact 6 assars.

Furthermore, the tax-farmer shall exact from the leather factories and shops according to custom, 1 denarius each month per shop. From the importers and merchants of hides he shall take 2 assars per hide.

Similarly the clothing merchants and retailers who sell in the city shall pay the tax-farmer the appropriate sum.

For the use of the two springs of the town 800 denarii per annum.

The tax-farmer shall exact 1 denarius for every load of corn, wine, fodder and all similar commodities, i. e. for each camel-load and journey.

For each unloaded camel he shall exact 1 denarius, as was exacted by Cilix, the freedman of the Emperor.

*The duties regulations of Palmyra, of the springs and of the salt monopoly which were formerly instituted under the supervision of Marinus, the ἡγεμών:*

Referring to . . . : four denarii for each imported and for each exported camel-load.

Referring to purple wool: four denarii for each imported and for each exported fleece of sheep-wool.

Furthermore, the tax-farmer shall exact for every class of commodity as is prescribed above.

He shall exact one as for each measured modius of salt, the modius containing 16 sextarii, and he shall provide such people with all necessary implements; and those who do not get (their salt) measured shall pay two sestertii for each modius in accordance with this law. Whoever sells salt in Palmyra or in the district of Palmyra shall pay in the tax-farmer's presence one as per modius, and from those who do not, the tax-farmer . . .

The persons from whom the tax-farmer (or his assistants?) takes security, shall give . . . the tax-farmer . . . This official shall take double the appropriate amount. In such a case (if necessary), he shall be summoned by the tax-farmer for double the amount. In any matter in which the tax-farmer lays a claim against anyone or has a claim brought against himself, judgment shall be awarded through the (Roman) τεταγμένος of Palmyra. The tax-farmer is authorized to take security by himself or through his assistants (?) from those who do not declare (their goods). If these securities are not redeemed by the third (?) day, it shall be permitted to the tax-farmer to sell them. (Everyone shall be entitled to buy them?) in a public square from the tax-farmer without risk of a legal claim against evil practice. If a security had been sold for less than the sum owed to the tax-farmer he is permitted to exact as much as the law allows.

The tax-farmer shall receive of the springs of Caesar in the customs district of Palmyra . . . Gaius, the ἡγεμών, referring to the defining of the taxes . . . between the Palmyrenians and the tax-farmers . . . : I have decreed that . . . Alcimus . . .

Whoever imports slaves to Palmyra or into its districts and exports them shall pay the tax-farmer 22 denarii for each slave. Whoever exports . . . shall pay the tax-farmer 12 denarii, and whoever sells a slave of more than one year's service 10 denarii, for an imported . . . slave 10 denarii, and on export 12 denarii, and whoever exports a slave of more than one year's service, shall assess his value (?) according to the legal prescription. Whoever sells a . . . slave . . . shall pay nine denarii, and on export . . . and on import of wool . . . (The tax-farmer) shall not exact duty on Italian wool which is imported (?) into Palmyra. The duty for other

(wool) exports shall be as agreed (?) . . . ; but (the tax-farmer) shall not exact duty on the export of Italian wool.

The tax-farmer shall exact the duty for myrrh in goat skins in accordance with the law; but the tax-farmer was mistaken owing to a writing-slip in the text of the sealed law. . . . The actual (?) duty amounts to 13 denarii.

The butcher tax must be reckoned in denarii as Caesar Germanicus made clear in a letter to Statilius, in which he stated that the dues must be reckoned in the Italian as; the tax-farmer shall exact the sums smaller than a denarius in small coin<sup>9</sup> according to custom. Tax is not due on animals which have fallen in a dying state.

I decree that the tax-farmer shall exact one denarius for a load of food-stuffs on import from outside the frontier or on export; but no customs are due from those who convey produce to and from the villages (of the territory of Palmyra) in accordance with the concession made to them. It is decided that the tax on pine-cones and other such products that are introduced as merchandise shall be assessed as for dry goods, as is the custom in the other towns.

On camels whether they are brought from outside the frontier with or without load one denarius is due for each according to the law, as also His Excellency Corbulo sanctioned in his letter to Barbarus. As to camel skins no tax is to be exacted, and in the case of vegetable fodder it is decided that it is subject to duty because it is saleable.

In respect to the prostitution tax, as I have already clearly decreed in the original law: the tax-farmer shall exact from those women who demand one denarius or more, one denarius per woman, and if they demand less, he shall exact as much as they demand.

In the case of sculptured bronzes, it was decided that the same tax should be exacted on the statues (*ἀνδριάντες*) as on the bronze, while on each other image the duty of one half load, and on two images that of one load should be paid.

As for (imported) salt, it is decreed that it shall be sold (only) in a public square, where the people congregate, and the Palmyrenian who buys (it) for his own consumption from the merchants shall pay one Italian as on each modius as is prescribed in the law; the duty on salt produced in Palmyra also amounts to one as, as is prescribed in the (same law?), and it shall be bought by Palmyrenians in the customary fashion.

As for the tax of purple . . .

As for retailers and . . . the tax-farmer shall exact in accordance with the regulations of the above law. As for imported furs, he shall exact two assars . . . , and on export . . .

Whoever brings cattle to pasturage from outside shall pay a tax, even

<sup>9</sup> See chapt. III § IV notes 25 and 46.



if . . . ; but, if he brings them . . . within the district of Palmyra for purposes of shearing, no tax shall be due. . . . It was agreed that the pasture dues should not be exacted from inhabitants, but that on cattle brought to pasturage from outside one denarius is due. The tax-farmer may brand imported cattle if he wishes."

Such town officials were called ἀργυροταμίαι in Palmyra,<sup>10</sup> λογισταὶ in Gerasa,<sup>11</sup> and γαζοφύλακες in Dura.<sup>12</sup> In addition, we know of tax-farmers in that town, in Edessa and in Berytus whose occupation seems to have been very similar to that of the Roman *publicani*.<sup>13</sup>

<sup>10</sup> *C. I. S.*, II, 3, I, nr. 3934.

<sup>11</sup> *S. E. G.*, VII, 826.

<sup>12</sup> *S. E. G.*, II, 824.

<sup>13</sup> See § II notes 42, 43 and 48.

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